



Stoneridge Commerce Center Specific Plan

ENERGY ANALYSIS

COUNTY OF RIVERSIDE

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LIST OF ABBREVIATED TERMS

%	Percent
(1)	Reference
AGSP	Airport Gateway Specific Plan
AQIA	<i>Stoneridge Commerce Center Specific Plan Air Quality Impact Analysis</i>
BACM	Best Available Control Measures
BTU	British Thermal Units
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
County	County of Riverside
CPEP	Clean Power and Electrification Pathway
CPUC	California Public Utilities Commission
DMV	Department of Motor Vehicles
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EMFAC	EMissions FACtor
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse Gas
GWh	Gigawatt Hour
HHD	Heavy-Heavy Duty Trucks
hp-hr-gal	Horsepower Hours Per Gallon
IEPR	Integrated Energy Policy Report
ISO	Independent Service Operator
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kBTU	Thousand-British Thermal Units
kWh	Kilowatt Hour
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHD1/LHD2	Light-Heavy Duty Trucks
MDV	Medium Duty Trucks
MHD	Medium-Heavy Duty Trucks

MMcfd	Million Cubic Feet Per Day
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
PG&E	Pacific Gas and Electric
Project	Stoneridge Commerce Center Specific Plan
PV	Photovoltaic
SCAB	South Coast Air Basin
SCE	Southern California Edison
SDAB	San Diego Air Basin
sf	Square Feet
SoCalGas	Southern California Gas
TEA-21	Transportation Equity Act for the 21 st Century
U.S.	United States
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Stoneridge Commerce Center Specific Plan Energy Analysis* is summarized below based on the significance criteria in Section 5 of this report consistent with Appendix G of the *CEQA Guidelines (CEQA Guidelines)* (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	5.0	<i>Less Than Significant</i>	<i>n/a</i>
Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	5.0	<i>Less Than Significant</i>	<i>n/a</i>

ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards
- California Code Title 24, Part 11, California Green Building Standards Code (CALGreen)
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California’s Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

Consistency with the above regulations is discussed in detail in section 6 of this report.

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1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Stoneridge Commerce Center Specific Plan Project (Project). The purpose of this report is to ensure that energy implication is considered by the City of Chino (Lead Agency), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

1.1 SITE LOCATION

The Stoneridge Commerce Center Specific Plan development (Project) is located west of Lakeview Avenue, between Ramona Expressway and Nuevo Road in the City of Chino as shown on Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project is proposing to amend the Specific Plan with a mix of industrial and commercial uses, with an opening year of 2032. This analysis evaluates two scenarios, Without Mid-County Parkway (MCP) and With MCP, as described below:

Without MCP:

- 2,940,000 square feet of High-Cube Cold Storage Warehouse use (40% of the total Light Industrial square footage)
- 2,940,000 square feet of High-Cube Fulfillment Center Warehouse use (40% of the total Light Industrial square footage)
- 735,000 square feet of High-Cube Warehouse use (10% of the total Light Industrial square footage)
- 735,000 square feet of Manufacturing use (10% of the total Light Industrial square footage)
- 427,759 square feet of Warehousing use (40% of the total Business Park square footage)
- 641,639 square feet of Industrial Park use (60% of the total Business Park square footage)
- 121,968 square feet of Commercial Retail uses

With MCP:

- 2,940,000 square feet of High-Cube Cold Storage Warehouse use (40% of the total Light Industrial square footage)
- 2,940,000 square feet of High-Cube Fulfillment Center Warehouse use (40% of the total Light Industrial square footage)
- 735,000 square feet of High-Cube Warehouse use (10% of the total Light Industrial square footage)
- 735,000 square feet of Manufacturing use (10% of the total Light Industrial square footage)

- 374,616 square feet of Warehousing use (40% of the total Business Park square footage)
- 561,924 square feet of Industrial Park use (60% of the total Business Park square footage)
- 126,542 square feet of Commercial Retail uses

As summarized in the *Stoneridge Commerce Center Specific Plan Alternative Truck Route Traffic Analysis Scoping Agreement* prepared by Urban Crossroads, Inc., the Without MCP scenario is expected to generate a total of approximately 23,680 two-way trips per day which include 19,236 two-way passenger car trips per day and 4,444 two-way truck trips per day. Under the With MCP scenario, the Project is anticipated to generate a total of 23,474 two-way trips per day which include 19,108 two-way passenger vehicle trips per day and 4,366 two-way truck trips per day (2). A Preliminary land use plan is shown on Exhibit 1-B (without MCP) and Exhibit 1-C (with MCP).

EXHIBIT 1-A: LOCATION MAP

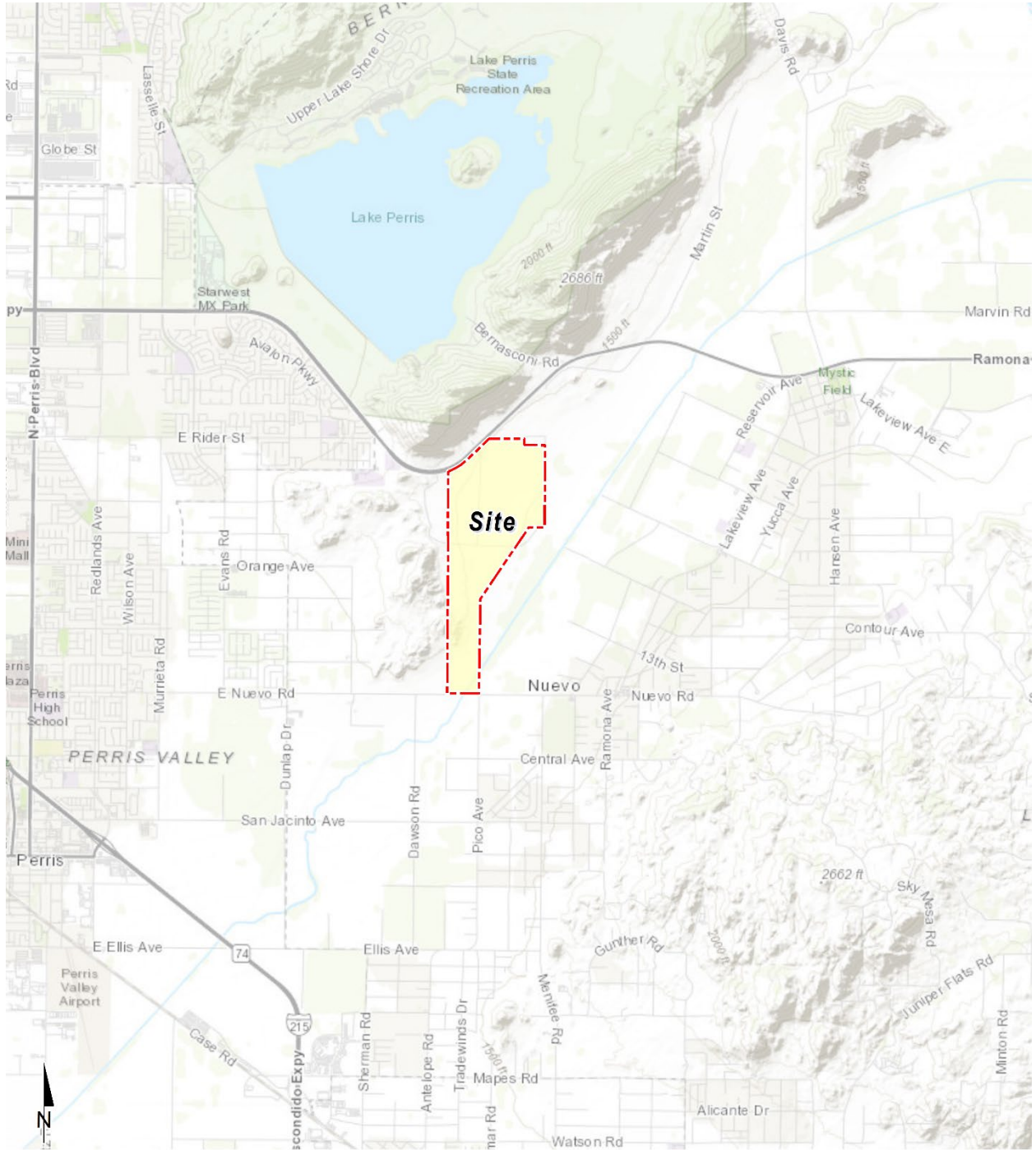


EXHIBIT 1-B: LAND USE PLAN WITHOUT MID-COUNTY PARKWAY

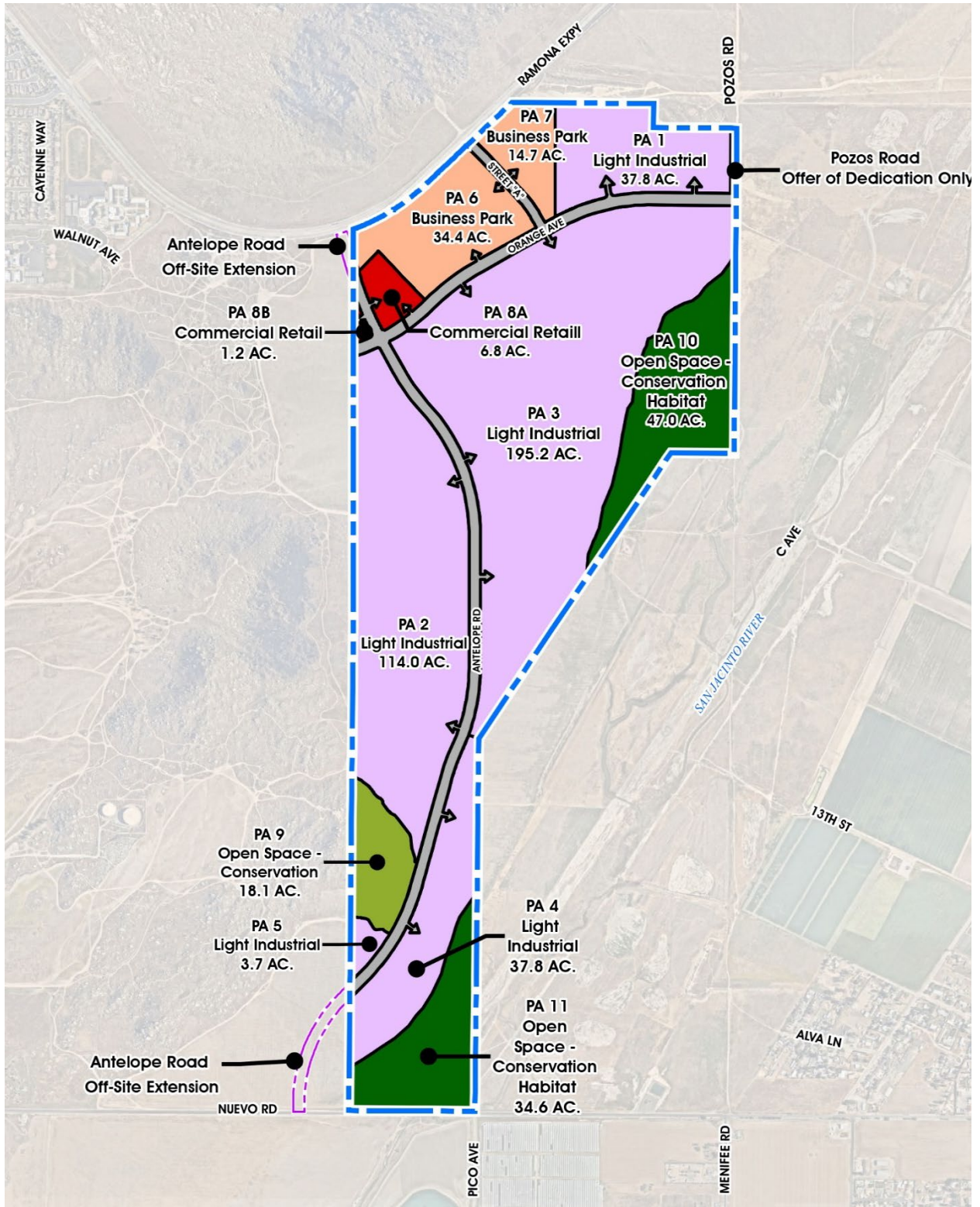
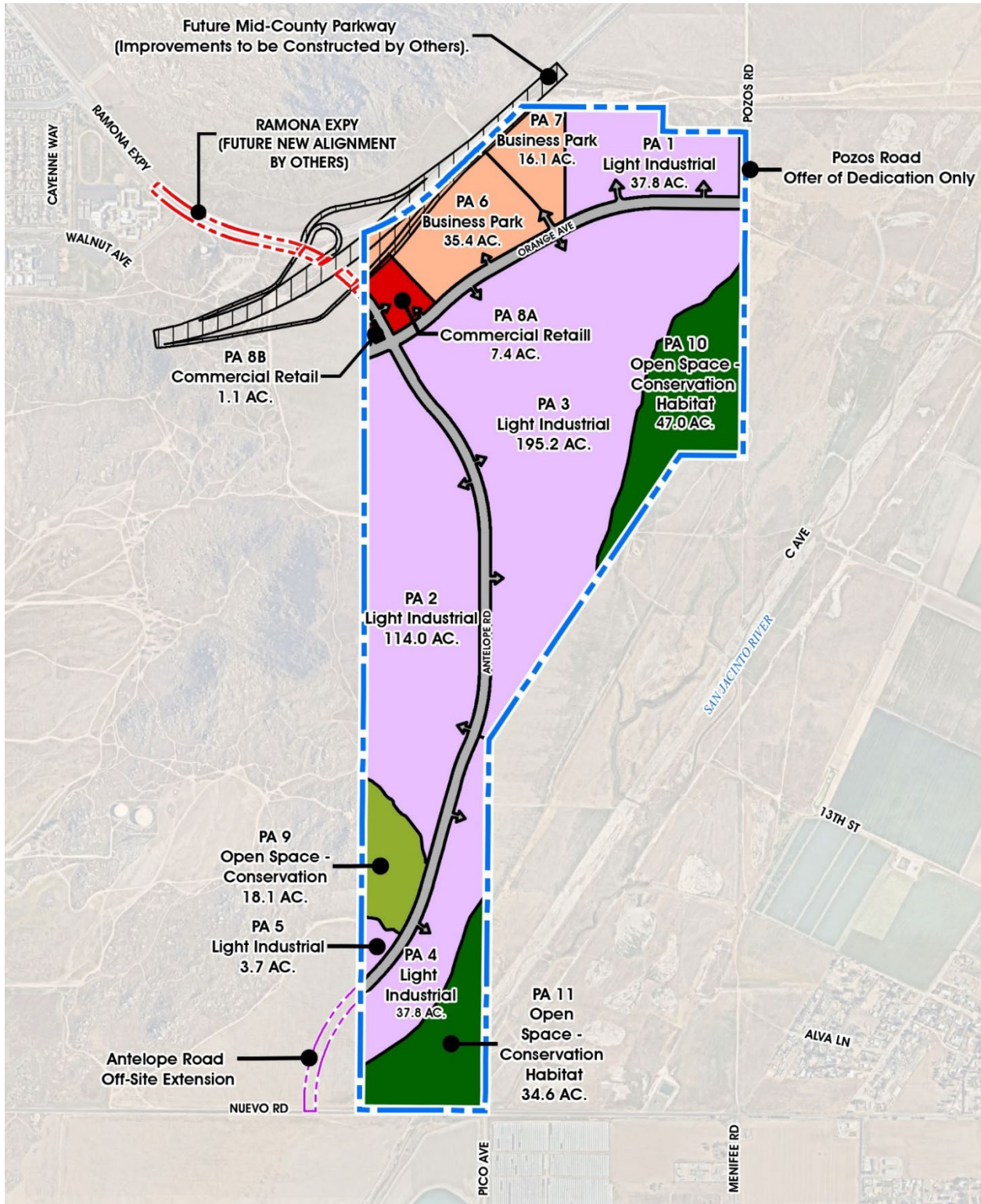


EXHIBIT 1-C: LAND USE PLAN WITH MID-COUNTY PARKWAY



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2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2020, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2021 and included (3):

- As of 2020, approximately 6,923 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2020, approximately 524 million barrels of petroleum
- As of 2020, approximately 2,075 billion cubic feet of natural gas
- As of 2020, approximately 1 million short tons of coal

The California Energy Commission's (CEC) Transportation Energy Demand Forecast released the 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 lays out graphs and data supporting CEC's projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030 (4)
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030 (4)
- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2019 (5)

The most recent data provided by the EIA for energy use in California by demand sector is from 2020 and is reported as follows:

- Approximately 34.0% transportation
- Approximately 24.6% industrial
- Approximately 21.8% residential
- Approximately 19.6% commercial (6)

In 2021, total system electric generation for California was 277,764 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 194,127 GWh which accounted for approximately 70% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (18%) (7). Natural gas is the main source for electricity generation at 50.19% of the total in-state electric generation system power as shown in Table 2-1.

TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2021)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	% of Imports	Total California Energy Mix	Total California Power Mix
Coal	303	0.2%	181	7,788	7,969	9.5%	8,272	3.0%
Natural Gas	97,431	50.2%	45	7,880	7,925	9.5%	105,356	379.0%
Oil	37	0.0%	-	-	-	0.0%	37	0.0%
Other (Waste Heat/Petroleum Coke)	382	0.2%	68	15	83	0.1%	465	0.2%
Nuclear	16,477	8.5%	524	8,756	9,281	11.1%	25,758	9.3%
Large Hydro	12,036	6.2%	12,042	1,578	13,620	16.3%	25,656	9.2%
Unspecified	-	0.0%	8,156	10,731	18,887	22.6%	18,887	6.8%
Total Thermal and Non-Renewables	126,666	65.2%	21,017	36,748	57,764	6910.0%	184,431	66.4%
Biomass	5,381	2.8%	864	26	890	1.1%	6,271	2.3%
Geothermal	11,116	5.7%	192	1,906	2,098	2.5%	13,214	4.8%
Small Hydro	2,531	1.3%	304	1	304	0.4%	2,835	1.0%
Solar	33,260	17.1%	220	5,979	6,199	7.4%	39,458	14.2%
Wind	15,173	7.8%	9,976	6,405	16,381	19.6%	31,555	11.4%
Total Renewables	67,461	34.8%	11,555	14,317	25,872	3090.0%	93,333	33.6%
SYSTEM TOTALS	194,127	100.0%	32,572	51,064	83,636	100.0%	277,764	100.0%

Source: CECs 2021 Total System Electric Generation

An updated summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below (8):

- In 2021, California was the seventh-largest producer of crude oil among the 50 states, and, as of January 2021, it ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states and, the state accounted for 15% of the nation’s jet fuel consumption and 10% of motor gasoline consumption in 2020.
- In 2019, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all other states except Rhode Island, due in part to its mild climate and its energy efficiency programs.
- In 2021, California was the nation’s top producer of electricity from solar, geothermal, and biomass energy. The state was fourth in the nation in conventional hydroelectric power generation, down from second in 2019, in part because of drought and increased water demand.
- In 2021, California was the fourth-largest electricity producer in the nation, but the state was also the nation’s second-largest consumer of electricity, and in 2020, it received about 30% of its electricity supply from generating facilities outside of California, including imports from Mexico.

As indicated above, California is one of the nation’s leading energy-producing states, and California’s per capita energy use is among the nation’s most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

2.2 ELECTRICITY

The usage associated with electricity use were calculated using CalEEMod Version 2022.1. The Southern California region’s electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board’s once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts (9). Similarly, the subsequent 2021 IEPR’s provides information and policy recommendations on advancing a clean, reliable, and affordable energy system.

California’s electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit

corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (10).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the Project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2018 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (11).

Table 2-2, SCE's specific proportional shares of electricity sources in 2021. As indicated in Table 2-2, the 2021 SCE Power Mix has renewable energy at 31.4% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 10.2%, large hydroelectric sources are at 2.3%, solar energy is at 14.9%, and coal is at 0% (12).

TABLE 2-2: SCE 2021 POWER CONTENT MIX

Energy Resources	2021 SCE Power Mix
Eligible Renewable	31.4%
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	14.9%
Wind	10.2%
Coal	0.0%
Large Hydroelectric	2.3%
Natural Gas	22.3%
Nuclear	9.2%
Other	0.2%
Unspecified Sources of power*	34.6%
Total	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

2.3 NATURAL GAS

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.

The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

A significant amount of gas (about 19%, or 1131 MMcf, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.

The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.

Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.

PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet

California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements .

Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.

The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.

Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.

In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).

In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A

certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.

Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.

In order properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California." (13)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California (14), and those vehicles consume an estimated 17.2 billion gallons of fuel each year¹. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

¹ Fuel consumptions estimated utilizing information from EMFAC2021.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles (14). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 10% of the nation's total consumption. The state is the largest U.S. consumer of motor gasoline and jet fuel, and 85% of the petroleum consumed in California is used in the transportation sector (15).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2019, about 37% of the natural gas delivered to consumers went to the state's industrial sector, and about 28% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the state's utility-scale electricity generation in 2019. The residential sector, where two-thirds of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1% (15).

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3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

3.1 FEDERAL REGULATIONS

3.1.1 INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991 (ISTEA)

ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

3.1.2 THE TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA-21)

TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

3.2 CALIFORNIA REGULATIONS

3.2.1 INTEGRATED ENERGY POLICY REPORT (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2021 IEPR was adopted February 2022, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2021 IEPR provides the results

of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. Additionally, the 2021 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs (16).

3.2.2 STATE OF CALIFORNIA ENERGY PLAN

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

3.2.3 CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective on January 1, 2023. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made (17).

3.2.4 AB 1493 PAVLEY REGULATIONS AND FUEL EFFICIENCY STANDARDS

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

3.2.5 CALIFORNIA'S RENEWABLE PORTFOLIO STANDARD (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 33% of total retail sales by 2020 (18).

3.2.6 CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

3.2.7 EXECUTIVE ORDER N-79-20 AND ADVANCED CLEAN CARS II

On August 25, 2022 CARB approved the Advanced Clean Cars II rule, which codifies the goals set out in Executive Order N-79-20 and establishes a year-by-year roadmap such that by 2035, 100% of new cars and light trucks sold in California will be zero-emission vehicles. Under this regulation, automakers are required to accelerate deliveries of zero-emission light-duty vehicles, beginning with model year 2026. CARB estimates that between 2026 and 2040, the regulation would reduce GHG emissions by a cumulative 395 million metric tons, equivalent to reducing petroleum use by 915 million barrels.

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4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

4.1 EVALUATION CRITERIA

Appendix F of the *State CEQA Guidelines* (19), states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, and oil; and
- Increasing reliance on renewable energy sources.

In compliance with Appendix G of the *State CEQA Guidelines* (20), this report analyzes the Project's anticipated energy use during construction and operations to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

4.2 METHODOLOGY

Information from the CalEEMod Version 2022.1 outputs for the *Stoneridge Commerce Center Specific Plan Air Quality Impact Analysis* (AQIA) (21) was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands.

4.2.1 CAL EEMOD

In May 2022, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage (22). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendices 4.1 through 4.2.

4.2.2 EMISSION FACTORS MODEL

On May 2, 2022, the EPA approved the 2021 version of the EMISSIONS FACTOR model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (23). This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of

analysis, the 2023 and 2024 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Outputs from the EMFAC2021 model run is provided in Appendix 4.3.

4.3 CONSTRUCTION ENERGY DEMANDS

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

4.3.1 CONSTRUCTION POWER COST

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost.

CONSTRUCTION DURATION

For purposes of analysis, construction of Project is expected to commence in July 2023 and would end in November 2031 (21). The construction schedule utilized in the analysis, shown in Table 4-1, represents a “worst-case” analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (24).

TABLE 4-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Site Preparation	7/1/2023	3/9/2024	180
Grading/Blasting	3/10/2024	12/20/2025	465
Building Construction	3/22/2026	11/13/2031	1,474
Paving	3/22/2026	11/13/2031	1,474
Architectural Coating	3/22/2026	11/13/2031	1,474

PROJECT CONSTRUCTION POWER COST

The *2022 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of \$2.41, which was used to calculate the Project’s total construction power cost (25).

As shown on Table 4-2, the total power cost of the on-site electricity usage during the construction of the Project is estimated to be approximately \$3,307,523.28 under the Without MCP scenario and 3,276,606.84 under the With MCP scenario.

TABLE 4-2: CONSTRUCTION POWER COST

Scenario	Land Use	Power Cost (per 1,000 SF of building per month of construction)	Total Building Size (1,000 SF)	Const. Duration (months)	Total Project Construction Power Cost
Without MCP	High-Cube Cold Storage Warehouse	\$2.41	2,940.000	100	\$708,540.00
	High-Cube Fulfillment Center Warehouse	\$2.41	2,940.000	100	\$708,540.00
	High-Cube Warehouse	\$2.41	735.000	100	\$177,135.00
	Manufacturing	\$2.41	735.000	100	\$177,135.00
	Warehousing	\$2.41	427.759	100	\$103,089.92
	Industrial Park	\$2.41	641.639	100	\$154,635.00
	Commercial	\$2.41	121.968	100	\$29,394.29
	Landscape	\$2.41	2,316.569	100	\$558,293.13
	Parking	\$2.41	1,498.464	100	\$361,129.82
	Other Asphalt Surfaces	\$2.41	1,367.764	100	\$329,631.12
	TOTAL PROJECT CONSTRUCTION COST - WITHOUT MCP				
With MCP	High-Cube Cold Storage Warehouse	\$2.41	2,940.000	100	\$708,540.00
	High-Cube Fulfillment Center Warehouse	\$2.41	2,940.000	100	\$708,540.00
	High-Cube Warehouse	\$2.41	735.000	100	\$177,135.00
	Manufacturing	\$2.41	735.000	100	\$177,135.00
	Warehousing	\$2.41	374.616	100	\$90,282.46
	Industrial Park	\$2.41	561.924	100	\$135,423.68
	Commercial	\$2.41	126.542	100	\$30,496.62
	Landscape	\$2.41	2,316.569	100	\$558,293.13
	Parking	\$2.41	1,498.464	100	\$361,129.82
	Other Asphalt Surfaces	\$2.41	1,367.764	100	\$329,631.12
	TOTAL PROJECT CONSTRUCTION COST - WITH MCP				

4.3.2 CONSTRUCTION ELECTRICITY USAGE

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4-2) by the utility provider cost per kilowatt hour (kWh) of electricity.

PROJECT CONSTRUCTION ELECTRICITY USAGE

The SCE's general service rate schedule were used to determine the Project's electrical usage. As of June 1, 2022, SCE's general service rate is \$0.13 per kilowatt hours (kWh) of electricity for industrial services (26). As shown on Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 26,377,887 kWh under the Without MCP scenario and 26,131,325 kWh under the With MCP scenario.

TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

Scenario	Land Use	Cost per kWh	Total Project Construction Electricity Usage (kWh)
Without MCP	High-Cube Cold Storage Warehouse	\$0.13	5,650,690
	High-Cube Fulfillment Center Warehouse	\$0.13	5,650,690
	High-Cube Warehouse	\$0.13	1,412,672
	Manufacturing	\$0.13	1,412,672
	Warehousing	\$0.13	822,154
	Industrial Park	\$0.13	1,233,232
	Commercial	\$0.13	234,423
	Landscape	\$0.13	4,452,453
	Parking	\$0.13	2,880,053
	Other Asphalt Surfaces	\$0.13	2,628,847
	TOTAL PROJECT CONSTRUCTION ELECTRICITY USAGE (kWh) - WITHOUT MCP		
With MCP	High-Cube Cold Storage Warehouse	\$0.13	5,650,690
	High-Cube Fulfillment Center Warehouse	\$0.13	5,650,690
	High-Cube Warehouse	\$0.13	1,412,672
	Manufacturing	\$0.13	1,412,672
	Warehousing	\$0.13	720,013
	Industrial Park	\$0.13	1,080,020
	Commercial	\$0.13	243,214
	Landscape	\$0.13	4,452,453
	Parking	\$0.13	2,880,053
	Other Asphalt Surfaces	\$0.13	2,628,847
	TOTAL PROJECT CONSTRUCTION ELECTRICITY USAGE (kWh) - WITH MCP		

4.3.3 CONSTRUCTION EQUIPMENT FUEL ESTIMATES

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

CONSTRUCTION EQUIPMENT

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 4-4 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the County Code.

TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Quantity	Hours Per Day
Site Preparation	Rubber Tired Dozers	6	8
	Crawler Tractors	8	8
	Graders	2	8

Construction Activity	Equipment	Quantity	Hours Per Day
Grading	Excavators	4	8
	Scrapers	4	8
	Rubber Tired Dozers	2	8
	Crawler Tractors	4	8
Building Construction	Cranes	2	8
	Forklifts	6	8
	Generator Sets	2	8
	Tractors/Loaders/Backhoes	6	8
	Welders	2	8
Paving	Pavers	4	8
	Paving Equipment	4	8
	Rollers	4	8
Architectural Coating	Air Compressors	2	8

PROJECT CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (27). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered, which is consistent with industry standards.

Diesel fuel would be supplied by existing commercial fuel providers serving the Project area and region². As presented in Table 4-5, Project construction activities would consume an estimated 962,504 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require ongoing or permanent commitment of diesel fuel resources for this purpose.

² Based on Appendix A of the CalEEMod User’s Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Activity/Duration	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Site Preparation	180	Crawler Tractors	87	8	8	0.43	2,394	23,295
		Rubber Tired Dozers	367	6	8	0.4	7,046	68,560
Grading/Blasting	465	Crawler Tractors	87	4	8	0.43	1,197	30,090
		Excavators	36	4	8	0.38	438	11,003
		Graders	148	2	8	0.41	971	24,403
		Scrapers	423	4	8	0.48	6,497	163,310
		Rubber Tired Dozers	367	2	8	0.4	2,349	59,037
Building Construction	1474	Cranes	367	2	8	0.29	1,703	135,678
		Tractors/Loaders/Backhoes	84	6	8	0.37	1,492	118,863
		Forklifts	82	6	8	0.2	787	62,721
		Generator Sets	14	2	8	0.74	166	13,207
		Welders	46	2	8	0.45	331	26,389
Paving	1474	Pavers	81	4	8	0.42	1,089	86,738
		Paving Equipment	89	4	8	0.36	1,025	81,690
		Rollers	36	4	8	0.38	438	34,879
Architectural Coating	1474	Air Compressors	37	2	8	0.48	284	22,641
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								962,504

4.3.4 CONSTRUCTION TRIPS AND VMT

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul truck commuting to and from the site. The number of workers and vendor trips are presented below in Table 4-6. It should be noted that for vendor trips, specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

TABLE 4-6: CONSTRUCTION TRIPS AND VMT

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation	35	119	14
Grading/Blasting	40	307	14
Building Construction	3,575	974	0
Paving	30	0	0
Architectural Coating	715	0	0

4.3.5 CONSTRUCTION WORKER FUEL ESTIMATES

With respect to estimated VMT for the Project, the construction worker trips (personal vehicles used by workers commuting to the Project from home) would generate an estimated 236,045,940 VMT during the 100 months of construction (21). Based on CalEEMod methodology, it is assumed that 50% of all construction worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1³), and 25% are from light-duty-trucks (LDT2⁴). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (23). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the California sub-area for the 2023 through 2031 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

As shown in Table 4-7, the estimated fuel consumption resulting from Project construction worker trips is 7,661,264 gallons during full construction of the Project. It should be noted that construction worker trips would represent a “single-event” gasoline fuel demand and would not require ongoing or permanent commitment of fuel resources for this purpose.

³ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

⁴ Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

Vehicle Category	Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
LDA	2023						
	Site Preparation	130	35	18.5	84,175	30.60	2,751
	2024						
	Site Preparation	50	35	18.5	32,375	31.51	1,028
	Grading/Blasting	212	40	18.5	156,880	31.51	4,979
	2025						
	Grading/Blasting	253	40	18.5	187,220	32.49	5,762
	2026						
	Building Construction	204	3,575	18.5	13,492,050	33.43	403,544
	Paving	204	30	18.5	113,220	33.43	3,386
	Architectural Coating	204	715	18.5	2,698,410	33.43	80,709
	2027						
	Building Construction	260	3,575	18.5	17,195,750	34.29	501,536
	Paving	260	30	18.5	144,300	34.29	4,209
	Architectural Coating	260	715	18.5	3,439,150	34.29	100,307
	2028						
	Building Construction	260	3,575	18.5	17,195,750	35.14	489,303
	Paving	260	30	18.5	144,300	35.14	4,106
	Architectural Coating	260	715	18.5	3,439,150	35.14	97,861
	2029						
	Building Construction	260	3,575	18.5	17,195,750	35.96	478,162
	Paving	260	30	18.5	144,300	35.96	4,013
	Architectural Coating	260	715	18.5	3,439,150	35.96	95,632
	2030						
	Building Construction	260	3,575	18.5	17,195,750	36.74	468,020
	Paving	260	30	18.5	144,300	36.74	3,927
	Architectural Coating	260	715	18.5	3,439,150	36.74	93,604
	2031						
	Building Construction	227	3,575	18.5	15,013,213	37.47	400,656
	Paving	227	30	18.5	125,985	37.47	3,362
Architectural Coating	227	715	18.5	3,002,643	37.47	80,131	
TOTAL CONSTRUCTION WORKER (LDA) FUEL CONSUMPTION							
3,326,989							
LDT1	2023						
	Site Preparation	130	18	18.5	42,088	24.15	1,743
	2024						
	Site Preparation	50	18	18.5	16,188	24.62	657

Vehicle Category	Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)	
	Grading/Blasting	212	20	18.5	78,440	24.62	3,186	
	2025							
	Grading/Blasting	253	20	18.5	93,610	25.14	3,724	
	2026							
	Building Construction	204	1,788	18.5	6,746,025	25.70	262,468	
	Paving	204	15	18.5	56,610	25.70	2,203	
	Architectural Coating	204	358	18.5	1,349,205	25.70	52,494	
	2027							
	Building Construction	260	1,788	18.5	8,597,875	26.22	327,935	
	Paving	260	15	18.5	72,150	26.22	2,752	
	Architectural Coating	260	358	18.5	1,719,575	26.22	65,587	
	2028							
	Building Construction	260	1,788	18.5	8,597,875	26.76	321,236	
	Paving	260	15	18.5	72,150	26.76	2,696	
	Architectural Coating	260	358	18.5	1,719,575	26.76	64,247	
	2029							
	Building Construction	260	1,788	18.5	8,597,875	27.31	314,813	
	Paving	260	15	18.5	72,150	27.31	2,642	
	Architectural Coating	260	358	18.5	1,719,575	27.31	62,963	
	2030							
	Building Construction	260	1,788	18.5	8,597,875	27.86	308,663	
	Paving	260	15	18.5	72,150	27.86	2,590	
	Architectural Coating	260	358	18.5	1,719,575	27.86	61,733	
	2031							
	Building Construction	227	1,788	18.5	7,506,606	28.38	264,469	
	Paving	227	15	18.5	62,993	28.38	2,219	
	Architectural Coating	227	358	18.5	1,501,321	28.38	52,894	
	TOTAL CONSTRUCTION WORKER (LDT1) FUEL CONSUMPTION							
	2,183,912							
	LDT2	2023						
		Site Preparation	130	18	18.5	42,088	23.88	1,762
		2024						
		Site Preparation	50	18	18.5	16,188	24.57	659
Grading/Blasting		212	20	18.5	78,440	24.57	3,192	
2025								
Grading/Blasting		253	20	18.5	93,610	25.29	3,701	
2026								
Building Construction	204	1,788	18.5	6,746,025	26.01	259,377		

Vehicle Category	Construction Activity	Duration (Days)	Worker Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
	Paving	204	15	18.5	56,610	26.01	2,177
	Architectural Coating	204	358	18.5	1,349,205	26.01	51,875
2027							
	Building Construction	260	1,788	18.5	8,597,875	26.63	322,895
	Paving	260	15	18.5	72,150	26.63	2,710
	Architectural Coating	260	358	18.5	1,719,575	26.63	64,579
2028							
	Building Construction	260	1,788	18.5	8,597,875	27.23	315,737
	Paving	260	15	18.5	72,150	27.23	2,650
	Architectural Coating	260	358	18.5	1,719,575	27.23	63,147
2029							
	Building Construction	260	1,788	18.5	8,597,875	27.79	309,374
	Paving	260	15	18.5	72,150	27.79	2,596
	Architectural Coating	260	358	18.5	1,719,575	27.79	61,875
2030							
	Building Construction	260	1,788	18.5	8,597,875	28.31	303,692
	Paving	260	15	18.5	72,150	28.31	2,548
	Architectural Coating	260	358	18.5	1,719,575	28.31	60,738
2031							
	Building Construction	227	1,788	18.5	7,506,606	28.79	260,740
	Paving	227	15	18.5	62,993	28.79	2,188
	Architectural Coating	227	358	18.5	1,501,321	28.79	52,148
TOTAL CONSTRUCTION WORKER (LDT2) FUEL CONSUMPTION							2,150,363
TOTAL CONSTRUCTION WORKER (LDA, LDT1, LDT2) FUEL CONSUMPTION							7,661,264

4.3.6 CONSTRUCTION VENDOR AND HAULING FUEL ESTIMATES

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) and material hauling trips would generate an estimated 32,757,952 VMT along area roadways for the Project over the duration of construction activity (21). It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD) and 50% of all vendor trips are from heavy-heavy duty trucks (HHD). Hauling trips are assumed to be performed only by HHD trucks. These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (21). Vehicle fuel efficiencies for MHDs and HHDs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHD and HHD vehicle classes within the California sub-area for the 2023 through 2031 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

Based on Table 4-8, it is estimated that 4,252,407 gallons of fuel will be consumed related to construction vendor and hauling trips during full construction of the Project. It should be noted

that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

TABLE 4-8: CONSTRUCTION VENDOR AND HAULING FUEL CONSUMPTION ESTIMATES

Vehicle Category	Construction Activity	Duration (Days)	Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Vendor MHD	2023						
	Site Preparation	130	119	10.2	157,794	8.42	18,737
	2024						
	Site Preparation	50	119	10.2	60,690	8.49	7,145
	Grading/Blasting	212	307	10.2	663,857	8.49	78,159
	2025						
	Grading/Blasting	253	307	10.2	792,244	8.60	92,112
	2026						
	Building Construction	204	974	10.2	2,026,699	8.72	232,287
	2027						
	Building Construction	260	974	10.2	2,583,048	8.87	291,084
	2028						
	Building Construction	260	974	10.2	2,583,048	9.09	284,270
	2029						
	Building Construction	260	974	10.2	2,583,048	9.37	275,780
	2030						
	Building Construction	260	974	10.2	2,583,048	9.72	265,720
2031							
Building Construction	227	974	10.2	2,255,200	10.15	222,178	
TOTAL CONSTRUCTION VENDOR (MHD) FUEL CONSUMPTION							1,767,472
Vendor HHD	2023						
	Site Preparation	130	119	10.2	157,794	6.04	26,114
	2024						
	Site Preparation	50	119	10.2	60,690	6.12	9,915
	Grading/Blasting	212	307	10.2	663,857	6.12	108,457
	2025						
	Grading/Blasting	253	307	10.2	792,244	6.22	127,419
	2026						
	Building Construction	204	974	10.2	2,026,699	6.33	320,377
	2027						
	Building Construction	260	974	10.2	2,583,048	6.45	400,420
	2028						
Building Construction	260	974	10.2	2,583,048	6.60	391,473	

Vehicle Category	Construction Activity	Duration (Days)	Trips / Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)	
2029								
	Building Construction	260	974	10.2	2,583,048	6.76	382,100	
2030								
	Building Construction	260	974	10.2	2,583,048	6.93	372,504	
2031								
	Building Construction	227	974	10.2	2,255,200	7.12	316,756	
TOTAL CONSTRUCTION VENDOR (HHDT) FUEL CONSUMPTION							2,455,532	
2023								
Hauling HHDT	Site Preparation	130	14	20	36,400	6.04	6,024	
	2024							
	Site Preparation	50	14	20	14,000	6.12	2,287	
	Grading/Blasting	212	14	20	59,360	6.12	9,698	
	2025							
	Grading/Blasting	253	14	20	70,840	6.22	11,393	
	TOTAL CONSTRUCTION HAULING (HHDT) FUEL CONSUMPTION							29,402
TOTAL CONSTRUCTION VENDOR AND HAULING FUEL CONSUMPTION							4,252,407	

4.3.7 CONSTRUCTION ENERGY EFFICIENCY/CONSERVATION MEASURES

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.” In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation fuel demands (fuel consumed by passenger car and truck vehicles accessing the Project site), fuel demands from operational equipment, and facilities energy demands (energy consumed by building operations and site maintenance activities).

4.4.1 TRANSPORTATION FUEL DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluated in the vehicle fleet mix and the total VMT. As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB (23). EMFAC2021 was run for the Riverside County area for the 2024 calendar year. Data from EMFAC2021 is shown in Appendix 4.3.

The estimated transportation energy demands are summarized on Table 4-9. As summarized on Table 4-9 the Project would result in 117,730,310 annual VMT under the Without MCP scenario and 116,535,002 annual VMT under the With MCP scenario. Annual fuel consumption is estimated to be 7,274,564 gallons per year under the Without MCP scenario and 7,179,004 gallons per year under the With MCP scenario.

TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION

Scenario	Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual Vehicle Miles Traveled	Estimated Annual Fuel Consumption (gallons)
Without MCP	HHD	7.31	28,286,379	3,868,904
	LDA	38.16	38,065,325	997,583
	LDT1	28.90	2,578,780	89,244
	LDT2	29.24	17,367,083	594,022
	LHD1	20.32	8,946,831	440,256
	LHD2	18.66	2,556,416	136,978
	MCY	42.81	1,659,044	38,753
	MDV	23.80	11,863,020	498,390
	MH	6.00	79,225	13,215
	MHD	10.63	6,287,990	591,524
	OBUS	7.83	10,079	1,287
	SBUS	6.83	23,436	3,433
	UBUS	6.86	6,701	976
	TOTAL (ALL VEHICLES) - WITHOUT MCP			117,730,310
With MCP	HHD	7.31	27,836,966	3,807,435
	LDA	38.16	37,804,009	990,734
	LDT1	28.90	2,561,077	88,631
	LDT2	29.24	17,247,859	589,944
	LHD1	20.32	8,860,399	436,003
	LHD2	18.66	2,531,719	135,654
	MCY	42.81	1,647,655	38,487
	MDV	23.80	11,781,581	494,969
	MH	6.00	81,596	13,610
	MHD	10.63	6,140,720	577,670
	OBUS	7.83	10,381	1,325
	SBUS	6.83	24,137	3,535
	UBUS	6.86	6,902	1,005
	TOTAL (ALL VEHICLES) - WITH MCP			116,535,002

4.4.2 ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMANDS

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this Project, on-site modeled operational equipment includes up to thirty 175 hp, natural gas-powered cargo handling equipment – port tractor operating 4 hours a day⁵ for 365 days of the year under both scenarios. Based on usage

⁵ Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

factors from EMFAC 2021, it is estimated that on-site cargo handling equipment would consume 139,257 gallons of fuel per year.

4.4.3 FACILITY ENERGY DEMANDS

Project building operations activities would result in the consumption of natural gas and electricity, which would be supplied to the Project by SCE and SoCalGas. Annual natural gas and electricity demands of the Project are summarized in Table 4-10. As summarized on Table 4-10, under the Without MCP scenario, the Project would result in 206,117,594 kBTU/year of natural gas demand and 102,594,513 kWh/year of electricity demand. Under the With MCP scenario, the Project would result in 202,930,997 kBTU/yr of natural gas demand and 101,004,082 kWh/year of electricity demand.

TABLE 4-10: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Scenario	Land Use	Natural Gas Demand	Electricity Demand
		(kBTU/year)	(kWh/year)
Without MCP	High-Cube Cold Storage Warehouse	77,795,496	64,296,476
	High-Cube Fulfillment Center Warehouse / High-Cube Warehouse / Warehouse	78,330,620	18,882,339
	Manufacturing	31,568,490	7,033,267
	Industrial Park	17,700,673	11,192,220
	Commercial Retail	722,315	1,190,211
	TOTAL PROJECT ENERGY DEMAND (WITHOUT MCP)	206,117,594	102,594,513
With MCP	High-Cube Cold Storage Warehouse	77,795,496	64,296,476
	High-Cube Fulfillment Center Warehouse / High-Cube Warehouse / Warehouse	77,316,005	18,637,756
	Manufacturing	31,568,490	7,033,267
	Industrial Park	15,501,603	9,801,737
	Commercial Retail	749,403	1,234,846
	TOTAL PROJECT ENERGY DEMAND (WITH MCP)	202,930,997	101,004,082

4.4.4 OPERATIONAL ENERGY EFFICIENCY/CONSERVATION MEASURES

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Standards Code).

ENHANCED VEHICLE FUEL EFFICIENCIES

Project annual fuel consumption estimates presented previously in Table 4-9 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

4.5 SUMMARY

4.5.1 CONSTRUCTION ENERGY DEMANDS

The estimated power cost of on-site electricity usage during the construction of the Project is assumed to be approximately \$3,307,523.28 for the Without MCP scenario and \$3,276,606.84 for the With MCP scenario. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project buildout, is calculated to be approximately 26,377,887 kWh for the Without MCP scenario and 26,131,325 for the With MCP scenario.

Construction equipment used by the Project would result in single event consumption of approximately 962,504 gallons of diesel fuel under both scenarios. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 7,661,264 gallons of fuel under both scenarios. Additionally, fuel consumption from construction vendor trips (MHDs and HHDs) and hauling (HHDs) will total approximately 4,252,407 gallons under both scenarios. Diesel fuel would be supplied by City and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2021 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (16). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

4.5.2 OPERATIONAL ENERGY DEMANDS

TRANSPORTATION ENERGY DEMANDS

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 7,274,564 gallons of fuel per year for the Without MCP scenario and 7,179,004 gallons of fuel per year for the With MCP scenario.

Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other industrial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other industrial uses.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Heavy duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The first battery-electric heavy-heavy duty trucks are being tested this year and SCAQMD is looking to integrate this new technology into large-scale truck operations. The following state strategies reduce GHG emissions from the medium and heavy-duty trucks:

- CARB's Mobile Source Strategy focuses on reducing GHGs through the transition to zero and low emission vehicles and from medium-duty and heavy-duty trucks.
- CARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25% by 2030, deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
- CARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions focus on establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling (CARB 2006). While the focus of Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.
- CARB's On-Road Truck and Bus Regulation (2010) requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent (28).
- CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions.

The proposed Project would implement project design features that would facilitate the accessibility, parking, and loading of trucks on-site.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. The Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In compliance with the California Green Building Standards Code and City requirements, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

FACILITY ENERGY DEMANDS

Project facility operational energy demands are estimated at: 206,117,594 kBTU/year of natural gas and 102,594,513 kWh/year of electricity under the Without MCP scenario and 202,930,997 kBTU/year of natural gas and 101,004,082 kWh/year of electricity under the With MCP scenario. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied by SCE. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other industrial uses of similar scale and configuration.

The proposed Project would comply with the County of Riverside's Good Neighbor Policy for Logistics and Warehouse/Distribution uses, which requires the use of electrically powered on-site cargo handling emissions, resulting in a reduction in on-site fuel consumption.

Additionally, the proposed Project will implement the screening table measures identified in the 2019 County of Riverside CAP update in order to achieve a minimum of 100 points. Implementation of these measures would result in further building energy demand reductions.

Lastly, the Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

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5 CONCLUSIONS

5.1 ENERGY IMPACT 1

Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California.

5.2 ENERGY IMPACT 2

Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project's consistency with the applicable state and local plans is discussed below.

CONSISTENCY WITH ISTE A

Transportation and access to the Project site is provided by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTE A because SCAG is not planning for intermodal facilities on or through the Project site.

CONSISTENCY WITH TEA-21

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

CONSISTENCY WITH IEPR

Electricity would be provided to the Project by SCE. SCE's *Clean Power and Electrification Pathway* (CPEP) white paper builds on existing state programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation the goals presented in the 2021 IEPR.

Additionally, the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2021 IEPR.

CONSISTENCY WITH STATE OF CALIFORNIA ENERGY PLAN

The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access and takes advantage of existing infrastructure systems. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with or obstruct, implementation of the State of California Energy Plan.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 6, ENERGY EFFICIENCY STANDARDS

The 2022 version of Title 24 was adopted by the CEC and will become effective on January 1, 2023. The proposed Project would be required to comply with the Title 24 standards in place at the time plan check submittals are made. Therefore, the Project is would not result in a significant impact on energy resources (17). The proposed Project would be subject to Title 24 standards.

CONSISTENCY WITH CALIFORNIA CODE TITLE 24, PART 11, CALGREEN

As previously stated, CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that were published on July 1, 2022 and will become effective on January 1, 2023. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

CONSISTENCY WITH AB 1493

AB 1493 is not applicable to the Project as it is a statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

CONSISTENCY WITH RPS

California's RPS is not applicable to the Project as it is a statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

CONSISTENCY WITH SB 350

The proposed Project would use energy from SCE, which have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption.

As shown above, the Project would not conflict with any of the state or local plans. As such, a less than significant impact is expected.

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6 REFERENCES

1. **Association of Environmental Professionals.** *2020 CEQA California Environmental Quality Act.* 2020.
2. **Urban Crossroads, Inc.** *Stoneridge Commerce Center Specific Plan Alternative Truck Route Traffic Analysis Scoping Agreement.* 2022.
3. **Administration, U.S. Energy Information.** California State Profile and Energy Estimates. [Online] <https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures>.
4. **California Energy Commission.** *Transportation Energy Demand Forecast 2018-2030.* 2018.
5. **U.S. Department of Energy.** Alternate Fuels Data Center. *U.S. Department of Energy.* [Online] <https://afdc.energy.gov/states/ca>.
6. **U.S. Energy Information Administration.** California Energy Consumption by End-Use Sector. *California State Profile and Energy Estimates.* [Online] <https://www.eia.gov/state/?sid=CA#tabs-2>.
7. **California Energy Commission.** 2021 Total System Electric Generation. *CA.gov.* [Online] [https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation#:~:text=Total%20generation%20for%20California%20was,from%2090%2C208%20GWh%20in%202020\)..](https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation#:~:text=Total%20generation%20for%20California%20was,from%2090%2C208%20GWh%20in%202020)..)
8. **U.S. Energy Information Administration.** California State Profile and Energy Estimates. [Online] <https://www.eia.gov/state/?sid=CA>.
9. **California Energy Commission.** *2013 Integrated Energy Policy Report.* 2013.
10. **California ISO.** Understanding the ISO. [Online] <http://www.caiso.com/about/Pages/OurBusiness/UnderstandingtheISO/default.aspx>.
11. **Southern California Edison.** *Southern California Edison's Service Area.* [Online] https://download.newsroom.edison.com/create_memory_file/?f_id=5cc32d492cfac24d21aecf4c&content_verified=True.
12. **Southern California Edison.** 2021 Power Content Label. *Southern California Edison.* [Online] <https://www.energy.ca.gov/filebrowser/download/4676>.
13. **California Public Utilities Commission.** Natural Gas and California. [Online] <https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california>.
14. **Department of Motor Vehicles.** *State of California Department of Motor Vehicles Statistics For Publication January Through December 2021.* 2021.
15. **U.S. Energy Information Administration.** California Analysis. *Energy Information Administration.* [Online] <https://www.eia.gov/beta/states/states/ca/analysis>.
16. **California Energy Commission Staff.** 2021 Integrated Energy Policy Report Update. [Online] 2021. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2021-integrated-energy-policy-report>.
17. **The California Energy Commission.** 2022 Building Energy Efficiency Standards. *California Energy Commission.* [Online] 2022. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>.
18. **California Energy Commission.** Renewables Portfolio Standard (RPS). [Online] 2002. <http://www.energy.ca.gov/portfolio/>.

19. **State of California.** *California Environmental Quality Act Guideline, California Public Resources Code, Title 14, Division 6, Chapter 3.*
20. **Association of Environmental Professionals.** *2019 CEQA California Environmental Quality Act.* 2019.
21. **Urban Crossroads, Inc.** *Stoneridge Commerce Center Specific Plan Air Quality Impact Analysis.* 2022.
22. **California Air Pollution Control Officers Association (CAPCOA).** *California Emissions Estimator Model (CalEEMod).* [Online] May 2022. www.caleemod.com.
23. **California Department of Transportation.** *EMFAC Software.* [Online] <http://www.dot.ca.gov/hq/env/air/pages/emfac.htm>.
24. **State of California.** *2019 CEQA California Environmental Quality Act.* 2019.
25. **Pray, Richard.** *2022 National Construction Estimator.* Carlsbad : Craftsman Book Company, 2022.
26. **Southern California Edison.** *Schedule GS-1 General Service. Regulatory Information - Rates Pricing.* [Online] <https://edisonintl.sharepoint.com/teams/Public/TM2/Shared%20Documents/Forms/AllItems.aspx?ga=1&id=%2Fteams%2FPublic%2FTM2%2FShared%20Documents%2FPublic%2FRegulatory%2FTariff%2DSCE%20Tariff%20Books%2FElectric%2FSchedules%2FGeneral%20Service%20%26%20Industr>.
27. **California Air Resources Board.** *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects For Evaluating Motor Vehicle Registration Fee Projects And Congestion Mitigation and Air Quality Improvement (CMAQ) Projects, Emission Factor Tables.* 2018.
28. —. *Truck and Bus Regulation.* [Online] <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>.

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7 CERTIFICATIONS

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Stoneridge Commerce Center Specific Plan. The information contained in this energy analysis report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007
AB2588 Regulatory Standards – Trinity Consultants • November 2006
Air Dispersion Modeling – Lakes Environmental • June 2006

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APPENDIX 4.1:

CALEEMOD PROJECT CONSTRUCTION EMISSIONS MODEL OUTPUTS

13265 Stoneridge Construction Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	13265 Stoneridge Construction
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	0.20
Location	33.823791796404166, -117.16992794449044
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5500
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	2,940	1000sqft	67.5	2,940,000	2,316,569	—	—	—
Unrefrigerated Warehouse-No Rail	4,103	1000sqft	94.2	4,102,759	0.00	—	—	—

Manufacturing	735	1000sqft	16.9	735,000	0.00	—	—	—
Industrial Park	642	1000sqft	14.7	641,639	0.00	—	—	—
Free-Standing Discount Superstore	100	1000sqft	2.30	100,000	0.00	—	—	—
Strip Mall	22.0	1000sqft	0.50	21,968	0.00	—	—	—
Other Asphalt Surfaces	34.4	Acre	34.4	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	31.4	Acre	31.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.6	47.3	58.1	375	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	97,537	97,537	3.53	6.65	282	99,889
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.6	46.2	61.4	300	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	92,763	92,763	1.86	6.74	7.32	94,827
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.8	32.4	42.8	209	0.22	0.43	46.4	46.8	0.43	11.1	11.6	—	65,637	65,637	1.28	4.61	78.6	67,116

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.70	5.91	7.82	38.1	0.04	0.08	8.47	8.55	0.08	2.03	2.11	—	10,867	10,867	0.21	0.76	13.0	11,112

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.48	1.35	11.0	64.7	0.13	0.28	13.0	13.3	0.28	5.83	6.11	—	16,259	16,259	0.57	0.81	14.6	16,531
2024	1.99	1.80	21.0	79.3	0.20	0.41	8.73	9.14	0.41	2.88	3.28	—	24,472	24,472	0.79	1.71	31.1	25,032
2025	1.98	1.70	20.5	78.9	0.20	0.41	8.73	9.14	0.41	2.88	3.28	—	24,307	24,307	0.79	1.70	30.7	24,864
2026	22.6	47.3	58.1	375	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	97,537	97,537	3.53	6.65	282	99,889
2027	21.7	46.3	55.0	352	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	95,898	95,898	1.69	6.43	255	98,111
2028	21.0	45.7	53.4	332	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	94,155	94,155	1.47	6.43	229	96,338
2029	18.5	45.0	50.4	314	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	92,400	92,400	1.38	6.21	205	94,490
2030	17.6	42.4	47.3	296	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	90,646	90,646	1.38	6.21	182	92,713
2031	16.7	41.7	46.2	282	0.30	0.60	64.8	65.4	0.38	15.5	15.9	—	88,926	88,926	1.28	4.23	160	90,379
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.46	1.33	11.3	64.0	0.13	0.28	13.0	13.3	0.28	5.83	6.11	—	16,220	16,220	0.57	0.81	0.38	16,478
2024	1.96	1.77	21.6	78.6	0.20	0.41	13.0	13.3	0.41	5.83	6.11	—	24,432	24,432	0.79	1.71	0.81	24,964
2025	1.94	1.67	21.0	78.2	0.20	0.41	8.73	9.14	0.41	2.88	3.28	—	24,268	24,268	0.79	1.70	0.80	24,796
2026	21.6	46.2	61.4	300	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	92,763	92,763	1.86	6.74	7.32	94,827
2027	20.7	45.3	58.3	282	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	91,225	91,225	1.77	6.43	6.62	93,191
2028	18.3	44.7	56.7	267	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	89,578	89,578	1.57	6.43	5.96	91,539
2029	17.6	42.3	53.5	252	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	87,916	87,916	1.47	6.21	5.33	89,809

2030	16.9	41.6	50.7	241	0.30	0.60	64.8	65.4	0.60	15.5	16.1	—	86,246	86,246	1.47	6.21	4.72	88,138
2031	15.9	40.9	47.5	228	0.30	0.60	64.8	65.4	0.38	15.5	15.9	—	84,603	84,603	1.38	5.99	4.16	86,427
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.53	0.48	4.09	23.1	0.05	0.10	4.70	4.80	0.10	2.10	2.20	—	5,842	5,842	0.20	0.29	2.28	5,937
2024	1.34	1.21	14.1	54.3	0.13	0.27	6.83	7.11	0.27	2.46	2.73	—	16,384	16,384	0.54	1.10	8.62	16,734
2025	1.35	1.17	14.6	54.3	0.14	0.28	6.05	6.33	0.28	1.99	2.27	—	16,814	16,814	0.55	1.18	9.20	17,188
2026	12.0	25.7	35.3	173	0.17	0.33	36.1	36.5	0.33	8.67	9.00	—	52,117	52,117	1.04	3.76	67.8	53,332
2027	14.8	32.4	42.8	209	0.22	0.43	46.3	46.7	0.43	11.1	11.5	—	65,637	65,637	1.28	4.59	78.6	67,116
2028	13.1	32.0	40.7	199	0.22	0.43	46.4	46.8	0.43	11.1	11.6	—	64,628	64,628	1.12	4.61	70.9	66,099
2029	12.6	30.2	38.4	188	0.22	0.43	46.3	46.7	0.43	11.1	11.5	—	63,254	63,254	1.05	4.44	63.2	64,665
2030	12.0	29.6	36.1	179	0.22	0.43	46.3	46.7	0.43	11.1	11.5	—	62,052	62,052	1.05	4.44	56.2	63,456
2031	9.90	25.4	30.7	147	0.19	0.37	40.2	40.6	0.23	9.64	9.87	—	52,866	52,866	0.85	3.72	42.9	54,038
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.10	0.09	0.75	4.21	0.01	0.02	0.86	0.88	0.02	0.38	0.40	—	967	967	0.03	0.05	0.38	983
2024	0.24	0.22	2.56	9.92	0.02	0.05	1.25	1.30	0.05	0.45	0.50	—	2,713	2,713	0.09	0.18	1.43	2,771
2025	0.25	0.21	2.66	9.90	0.03	0.05	1.10	1.16	0.05	0.36	0.42	—	2,784	2,784	0.09	0.20	1.52	2,846
2026	2.19	4.69	6.45	31.7	0.03	0.06	6.60	6.66	0.06	1.58	1.64	—	8,629	8,629	0.17	0.62	11.2	8,830
2027	2.70	5.91	7.82	38.1	0.04	0.08	8.45	8.52	0.08	2.03	2.10	—	10,867	10,867	0.21	0.76	13.0	11,112
2028	2.39	5.84	7.44	36.3	0.04	0.08	8.47	8.55	0.08	2.03	2.11	—	10,700	10,700	0.19	0.76	11.7	10,943
2029	2.29	5.52	7.00	34.3	0.04	0.08	8.45	8.52	0.08	2.03	2.10	—	10,472	10,472	0.17	0.73	10.5	10,706
2030	2.18	5.40	6.60	32.6	0.04	0.08	8.45	8.52	0.08	2.03	2.10	—	10,273	10,273	0.17	0.73	9.30	10,506
2031	1.81	4.63	5.60	26.9	0.03	0.07	7.34	7.40	0.04	1.76	1.80	—	8,753	8,753	0.14	0.62	7.10	8,947

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	5.41	59.9	0.10	0.21	—	0.21	0.21	—	0.21	—	11,060	11,060	0.45	0.09	—	11,097
Dust From Material Movement	—	—	—	—	—	—	11.3	11.3	—	5.37	5.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	5.41	59.9	0.10	0.21	—	0.21	0.21	—	0.21	—	11,060	11,060	0.45	0.09	—	11,097
Dust From Material Movement	—	—	—	—	—	—	11.3	11.3	—	5.37	5.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.37	1.95	21.6	0.04	0.07	—	0.07	0.07	—	0.07	—	3,982	3,982	0.16	0.03	—	3,996
Dust From Material Movement	—	—	—	—	—	—	4.08	4.08	—	1.93	1.93	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.36	3.94	0.01	0.01	—	0.01	0.01	—	0.01	—	659	659	0.03	0.01	—	662
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.19	0.18	3.17	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	514	514	0.02	0.02	2.20	522
Vendor	0.19	0.11	4.36	1.36	0.03	0.05	0.21	0.27	0.05	0.08	0.13	—	3,738	3,738	0.08	0.56	10.4	3,916
Hauling	0.04	0.02	1.09	0.26	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	948	948	0.02	0.15	1.99	995
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.21	2.41	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	472	472	0.02	0.02	0.06	478
Vendor	0.19	0.10	4.57	1.40	0.03	0.05	0.21	0.27	0.05	0.08	0.13	—	3,740	3,740	0.08	0.56	0.27	3,908
Hauling	0.04	0.01	1.14	0.26	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	948	948	0.02	0.15	0.05	994
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.91	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	172	172	0.01	0.01	0.34	175
Vendor	0.07	0.04	1.66	0.50	0.01	0.02	0.08	0.10	0.02	0.03	0.05	—	1,346	1,346	0.03	0.20	1.63	1,408
Hauling	0.01	0.01	0.41	0.09	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	341	341	0.01	0.05	0.31	358
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	28.5	28.5	< 0.005	< 0.005	0.06	28.9
Vendor	0.01	0.01	0.30	0.09	< 0.005	< 0.005	0.01	0.02	< 0.005	0.01	0.01	—	223	223	< 0.005	0.03	0.27	233
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	56.5	56.5	< 0.005	0.01	0.05	59.3

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	1.04	5.41	59.9	0.10	0.21	—	0.21	0.21	—	0.21	—	11,058	11,058	0.45	0.09	—	11,096
Dust From Material Movement	—	—	—	—	—	—	11.3	11.3	—	5.37	5.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	0.73	8.09	0.01	0.03	—	0.03	0.03	—	0.03	—	1,493	1,493	0.06	0.01	—	1,498
Dust From Material Movement	—	—	—	—	—	—	1.53	1.53	—	0.73	0.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.13	1.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	247	247	0.01	< 0.005	—	248

Dust From Material Movement:	—	—	—	—	—	—	0.28	0.28	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.20	2.21	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	463	463	0.02	0.02	0.05	469
Vendor	0.16	0.10	4.38	1.33	0.03	0.05	0.21	0.27	0.05	0.08	0.13	—	3,697	3,697	0.08	0.56	0.27	3,865
Hauling	0.04	0.01	1.10	0.26	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	935	935	0.02	0.15	0.05	981
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.31	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	63.3	63.3	< 0.005	< 0.005	0.12	64.2
Vendor	0.02	0.01	0.59	0.18	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	499	499	0.01	0.07	0.60	522
Hauling	0.01	< 0.005	0.15	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	126	126	< 0.005	0.02	0.11	133
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	10.5	10.5	< 0.005	< 0.005	0.02	10.6
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	82.6	82.6	< 0.005	0.01	0.10	86.5
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	20.9	20.9	< 0.005	< 0.005	0.02	21.9

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.30	8.97	72.3	0.12	0.25	—	0.25	0.25	—	0.25	—	13,430	13,430	0.54	0.11	—	13,476
Dust From Material Movement:	—	—	—	—	—	—	5.34	5.34	—	1.96	1.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.30	8.97	72.3	0.12	0.25	—	0.25	0.25	—	0.25	—	13,430	13,430	0.54	0.11	—	13,476
Dust From Material Movement:	—	—	—	—	—	—	5.34	5.34	—	1.96	1.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.76	5.21	42.0	0.07	0.15	—	0.15	0.15	—	0.15	—	7,806	7,806	0.32	0.06	—	7,832
Dust From Material Movement:	—	—	—	—	—	—	3.10	3.10	—	1.14	1.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	0.95	7.67	0.01	0.03	—	0.03	0.03	—	0.03	—	1,292	1,292	0.05	0.01	—	1,297

Dust From Material Movement:	—	—	—	—	—	—	0.57	0.57	—	0.21	0.21	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.22	0.21	0.19	3.34	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	576	576	0.02	0.02	2.28	585
Vendor	0.43	0.28	10.8	3.36	0.07	0.14	0.55	0.69	0.14	0.21	0.35	—	9,532	9,532	0.21	1.43	26.9	9,989
Hauling	0.04	0.01	1.06	0.25	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	935	935	0.02	0.15	1.98	982
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.21	0.19	0.23	2.52	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	529	529	0.03	0.02	0.06	536
Vendor	0.41	0.27	11.3	3.44	0.07	0.14	0.55	0.69	0.14	0.21	0.35	—	9,538	9,538	0.21	1.43	0.70	9,971
Hauling	0.04	0.01	1.10	0.26	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	935	935	0.02	0.15	0.05	981
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.12	0.11	0.13	1.54	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	311	311	0.01	0.01	0.57	316
Vendor	0.24	0.16	6.56	1.98	0.04	0.08	0.32	0.40	0.08	0.12	0.20	—	5,541	5,541	0.12	0.83	6.71	5,799
Hauling	0.02	0.01	0.64	0.15	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	—	543	543	0.01	0.09	0.49	570
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.28	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	51.6	51.6	< 0.005	< 0.005	0.09	52.3
Vendor	0.04	0.03	1.20	0.36	0.01	0.01	0.06	0.07	0.01	0.02	0.04	—	917	917	0.02	0.14	1.11	960
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	90.0	90.0	< 0.005	0.01	0.08	94.4

3.7. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.30	8.97	72.3	0.12	0.25	—	0.25	0.25	—	0.25	—	13,431	13,431	0.54	0.11	—	13,477
Dust From Material Movement	—	—	—	—	—	—	5.34	5.34	—	1.96	1.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.30	8.97	72.3	0.12	0.25	—	0.25	0.25	—	0.25	—	13,431	13,431	0.54	0.11	—	13,477
Dust From Material Movement	—	—	—	—	—	—	5.34	5.34	—	1.96	1.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.90	6.21	50.1	0.09	0.17	—	0.17	0.17	—	0.17	—	9,304	9,304	0.38	0.08	—	9,336
Dust From Material Movement	—	—	—	—	—	—	3.70	3.70	—	1.36	1.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.13	9.15	0.02	0.03	—	0.03	0.03	—	0.03	—	1,540	1,540	0.06	0.01	—	1,546
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.18	0.18	3.09	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	564	564	0.02	0.02	2.07	572
Vendor	0.42	0.20	10.3	3.21	0.07	0.14	0.55	0.69	0.14	0.21	0.35	—	9,392	9,392	0.21	1.43	26.7	9,850
Hauling	0.04	0.01	1.02	0.25	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	920	920	0.02	0.14	1.96	965
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.19	2.33	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	518	518	0.02	0.02	0.05	525
Vendor	0.41	0.19	10.8	3.29	0.07	0.14	0.55	0.69	0.14	0.21	0.35	—	9,399	9,399	0.21	1.43	0.69	9,830
Hauling	0.04	0.01	1.07	0.25	0.01	0.02	0.06	0.08	0.02	0.02	0.04	—	920	920	0.02	0.14	0.05	964
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.15	1.71	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	364	364	0.02	0.01	0.62	369
Vendor	0.29	0.14	7.47	2.25	0.05	0.10	0.38	0.48	0.10	0.14	0.24	—	6,509	6,509	0.14	0.99	8.00	6,815
Hauling	0.03	0.01	0.75	0.17	< 0.005	0.01	0.04	0.06	0.01	0.02	0.03	—	637	637	0.01	0.10	0.58	668
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	60.2	60.2	< 0.005	< 0.005	0.10	61.0
Vendor	0.05	0.03	1.36	0.41	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,078	1,078	0.02	0.16	1.32	1,128
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	106	106	< 0.005	0.02	0.10	111

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,260	5,260	0.21	0.04	—	5,278
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,260	5,260	0.21	0.04	—	5,278
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	2.39	17.5	0.03	0.05	—	0.05	0.05	—	0.05	—	2,934	2,934	0.12	0.02	—	2,944
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.44	3.19	0.01	0.01	—	0.01	0.01	—	0.01	—	486	486	0.02	< 0.005	—	487
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.8	15.1	14.0	257	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	49,306	49,306	2.09	1.69	167	50,030
Vendor	1.34	0.63	31.3	9.71	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	29,319	29,319	0.65	4.53	80.2	30,766
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.0	14.3	15.6	195	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	45,338	45,338	0.71	1.77	4.34	45,888
Vendor	1.30	0.58	32.7	9.97	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	29,341	29,341	0.65	4.53	2.08	30,709
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.90	7.91	9.54	114	0.00	0.00	1.63	1.63	0.00	0.00	0.00	—	25,607	25,607	0.40	0.99	40.2	25,952
Vendor	0.73	0.33	18.3	5.49	0.12	0.24	0.98	1.22	0.24	0.37	0.61	—	16,357	16,357	0.36	2.53	19.2	17,139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.62	1.44	1.74	20.7	0.00	0.00	0.30	0.30	0.00	0.00	0.00	—	4,240	4,240	0.07	0.16	6.66	4,297
Vendor	0.13	0.06	3.34	1.00	0.02	0.04	0.18	0.22	0.04	0.07	0.11	—	2,708	2,708	0.06	0.42	3.18	2,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.06	22.4	0.04	0.07	—	0.07	0.07	—	0.07	—	3,757	3,757	0.15	0.03	—	3,770
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.56	4.09	0.01	0.01	—	0.01	0.01	—	0.01	—	622	622	0.03	0.01	—	624
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.1	14.3	12.4	237	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	48,393	48,393	0.55	1.69	150	49,062
Vendor	1.30	0.61	30.1	9.45	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	28,783	28,783	0.67	4.31	73.3	30,158
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	15.3	13.6	14.0	180	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	44,507	44,507	0.63	1.69	3.90	45,032

Vendor	1.28	0.56	31.5	9.73	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	28,805	28,805	0.65	4.31	1.90	30,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	11.0	9.68	11.1	135	0.00	0.00	2.08	2.08	0.00	0.00	0.00	—	32,193	32,193	0.45	1.21	46.3	32,611
Vendor	0.93	0.42	22.4	6.86	0.16	0.31	1.25	1.56	0.31	0.47	0.78	—	20,566	20,566	0.48	3.08	22.6	21,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.00	1.77	2.02	24.6	0.00	0.00	0.38	0.38	0.00	0.00	0.00	—	5,330	5,330	0.07	0.20	7.67	5,399
Vendor	0.17	0.08	4.09	1.25	0.03	0.06	0.23	0.29	0.06	0.09	0.14	—	3,405	3,405	0.08	0.51	3.74	3,563
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,260	5,260	0.21	0.04	—	5,278
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,260	5,260	0.21	0.04	—	5,278
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.07	22.5	0.04	0.07	—	0.07	0.07	—	0.07	—	3,768	3,768	0.15	0.03	—	3,781
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.56	4.10	0.01	0.01	—	0.01	0.01	—	0.01	—	624	624	0.03	0.01	—	626
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	15.6	13.9	12.3	221	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	47,489	47,489	0.55	1.69	135	48,143
Vendor	1.30	0.61	28.6	9.23	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	28,131	28,131	0.46	4.31	66.7	29,494
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.4	13.1	14.0	167	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	43,683	43,683	0.63	1.69	3.50	44,207
Vendor	1.26	0.56	30.0	9.47	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	28,154	28,154	0.46	4.31	1.73	29,452
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.54	9.31	9.99	126	0.00	0.00	2.09	2.09	0.00	0.00	0.00	—	31,683	31,683	0.45	1.21	41.7	32,097
Vendor	0.92	0.42	21.6	6.70	0.16	0.31	1.25	1.57	0.31	0.47	0.78	—	20,156	20,156	0.33	3.09	20.6	21,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.74	1.70	1.82	23.0	0.00	0.00	0.38	0.38	0.00	0.00	0.00	—	5,245	5,245	0.07	0.20	6.90	5,314

Vendor	0.17	0.08	3.94	1.22	0.03	0.06	0.23	0.29	0.06	0.09	0.14	—	3,337	3,337	0.05	0.51	3.41	3,494
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.06	22.4	0.04	0.07	—	0.07	0.07	—	0.07	—	3,756	3,756	0.15	0.03	—	3,769
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.56	4.09	0.01	0.01	—	0.01	0.01	—	0.01	—	622	622	0.03	0.01	—	624
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.5	13.2	10.7	207	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	46,646	46,646	0.47	1.69	120	47,283
Vendor	1.30	0.61	27.6	8.99	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	27,397	27,397	0.46	4.09	59.5	28,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.8	11.1	12.3	155	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	42,916	42,916	0.55	1.69	3.13	43,438
Vendor	1.26	0.56	28.8	9.22	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	27,420	27,420	0.46	4.09	1.55	28,652
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.12	7.91	8.81	117	0.00	0.00	2.08	2.08	0.00	0.00	0.00	—	31,040	31,040	0.39	1.21	37.1	31,448
Vendor	0.91	0.42	20.7	6.51	0.16	0.31	1.25	1.56	0.31	0.47	0.78	—	19,576	19,576	0.33	2.92	18.4	20,474
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.66	1.44	1.61	21.4	0.00	0.00	0.38	0.38	0.00	0.00	0.00	—	5,139	5,139	0.07	0.20	6.14	5,207
Vendor	0.17	0.08	3.77	1.19	0.03	0.06	0.23	0.29	0.06	0.09	0.14	—	3,241	3,241	0.05	0.48	3.04	3,390
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	3.06	22.4	0.04	0.07	—	0.07	0.07	—	0.07	—	3,756	3,756	0.15	0.03	—	3,769
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.56	4.09	0.01	0.01	—	0.01	0.01	—	0.01	—	622	622	0.03	0.01	—	624
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.8	11.2	9.18	192	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	45,860	45,860	0.47	1.69	107	46,484
Vendor	1.32	0.61	26.4	8.79	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	26,592	26,592	0.46	4.09	52.6	27,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.2	10.5	10.8	146	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	42,200	42,200	0.55	1.69	2.77	42,722

Vendor	1.26	0.56	27.7	9.03	0.22	0.44	1.75	2.19	0.44	0.66	1.10	—	26,615	26,615	0.46	4.09	1.37	27,847
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.61	7.40	7.71	110	0.00	0.00	2.08	2.08	0.00	0.00	0.00	—	30,521	30,521	0.39	1.21	33.1	30,925
Vendor	0.93	0.42	19.8	6.36	0.16	0.31	1.25	1.56	0.31	0.47	0.78	—	19,001	19,001	0.33	2.92	16.2	19,897
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.35	1.41	20.1	0.00	0.00	0.38	0.38	0.00	0.00	0.00	—	5,053	5,053	0.07	0.20	5.47	5,120
Vendor	0.17	0.08	3.61	1.16	0.03	0.06	0.23	0.29	0.06	0.09	0.14	—	3,146	3,146	0.05	0.48	2.69	3,294
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	4.29	31.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,259	5,259	0.21	0.04	—	5,277
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.31	2.66	19.4	0.03	0.06	—	0.06	0.06	—	0.06	—	3,262	3,262	0.13	0.03	—	3,274
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.49	3.55	0.01	0.01	—	0.01	0.01	—	0.01	—	540	540	0.02	< 0.005	—	542
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.1	10.5	9.10	181	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	45,143	45,143	0.39	0.24	94.9	45,318
Vendor	1.10	0.61	25.3	8.55	0.22	0.44	1.75	2.19	0.22	0.66	0.88	—	25,740	25,740	0.46	3.87	45.7	26,951
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	11.6	9.89	9.18	136	0.00	0.00	2.92	2.92	0.00	0.00	0.00	—	41,546	41,546	0.47	1.69	2.46	42,065
Vendor	1.04	0.56	26.5	8.79	0.22	0.44	1.75	2.19	0.22	0.66	0.88	—	25,763	25,763	0.46	3.87	1.18	26,930
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.19	6.14	6.65	89.1	0.00	0.00	1.81	1.81	0.00	0.00	0.00	—	26,096	26,096	0.29	1.05	25.4	26,442
Vendor	0.67	0.36	16.5	5.38	0.14	0.27	1.09	1.36	0.14	0.41	0.54	—	15,974	15,974	0.28	2.40	12.2	16,709
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.31	1.12	1.21	16.3	0.00	0.00	0.33	0.33	0.00	0.00	0.00	—	4,321	4,321	0.05	0.17	4.20	4,378

Vendor	0.12	0.07	3.02	0.98	0.02	0.05	0.20	0.25	0.02	0.07	0.10	—	2,645	2,645	0.05	0.40	2.02	2,766
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.18	2.16	11.8	0.02	0.03	—	0.03	0.03	—	0.03	—	1,685	1,685	0.07	0.01	—	1,691
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.03	0.39	2.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	279	279	0.01	< 0.005	—	280
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.12	2.15	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	414	414	0.02	0.01	1.40	420
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.13	1.63	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	380	380	0.01	0.01	0.04	385
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.08	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	215	215	< 0.005	0.01	0.34	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	35.6	35.6	< 0.005	< 0.005	0.06	36.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,022	3,022	0.12	0.02	—	3,033
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,022	3,022	0.12	0.02	—	3,033
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.76	15.1	0.02	0.04	—	0.04	0.04	—	0.04	—	2,159	2,159	0.09	0.02	—	2,166
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.50	2.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	357	357	0.01	< 0.005	—	359
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.10	1.99	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	406	406	< 0.005	0.01	1.26	412
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.12	1.51	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	373	373	0.01	0.01	0.03	378
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.13	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	270	270	< 0.005	0.01	0.39	274
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	44.7	44.7	< 0.005	< 0.005	0.06	45.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,022	3,022	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,022	3,022	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.77	15.2	0.02	0.04	—	0.04	0.04	—	0.04	—	2,165	2,165	0.09	0.02	—	2,172
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.51	2.77	< 0.005	0.01	—	0.01	0.01	—	0.01	—	358	358	0.01	< 0.005	—	360
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.86	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	398	398	< 0.005	0.01	1.13	404
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.12	1.40	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	367	367	0.01	0.01	0.03	371	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.08	0.08	0.08	1.06	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	266	266	< 0.005	0.01	0.35	269	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.02	0.19	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	44.0	44.0	< 0.005	< 0.005	0.06	44.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.27. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.76	15.1	0.02	0.04	—	0.04	0.04	—	0.04	—	2,158	2,158	0.09	0.02	—	2,165
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.50	2.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	357	357	0.01	< 0.005	—	359
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.09	1.74	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	391	391	< 0.005	0.01	1.01	397
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.10	1.30	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	360	360	< 0.005	0.01	0.03	364

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.99	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	260	260	< 0.005	0.01	0.31	264
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	43.1	43.1	< 0.005	< 0.005	0.05	43.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Paving (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.76	15.1	0.02	0.04	—	0.04	0.04	—	0.04	—	2,158	2,158	0.09	0.02	—	2,165	
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.04	0.04	0.50	2.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	357	357	0.01	< 0.005	—	359	
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.11	0.09	0.08	1.61	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	385	385	< 0.005	0.01	0.90	390	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.10	0.09	0.09	1.23	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	354	354	< 0.005	0.01	0.02	358	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.06	0.92	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	256	256	< 0.005	0.01	0.28	259	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	42.4	42.4	< 0.005	< 0.005	0.05	43.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.31. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	3.87	21.2	0.03	0.06	—	0.06	0.06	—	0.06	—	3,021	3,021	0.12	0.02	—	3,032
Paving	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	2.40	13.2	0.02	0.03	—	0.03	0.03	—	0.03	—	1,874	1,874	0.08	0.02	—	1,881
Paving	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.44	2.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	310	310	0.01	< 0.005	—	311	
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.10	0.09	0.08	1.52	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	379	379	< 0.005	< 0.005	0.80	380	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.10	0.08	0.08	1.14	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	349	349	< 0.005	0.01	0.02	353	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.06	0.05	0.06	0.75	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	219	219	< 0.005	0.01	0.21	222	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.14	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	36.3	36.3	< 0.005	< 0.005	0.04	36.7	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.33. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.96	1.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	199	199	0.01	< 0.005	—	199
Architectural Coatings	—	15.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.18	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.9	32.9	< 0.005	< 0.005	—	33.0
Architectural Coatings	—	2.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.37	3.03	2.81	51.3	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,861	9,861	0.42	0.34	33.4	10,006
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.21	2.85	3.13	38.9	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,068	9,068	0.14	0.35	0.87	9,178
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.78	1.58	1.91	22.7	0.00	0.00	0.33	0.33	0.00	0.00	0.00	—	5,121	5,121	0.08	0.20	8.05	5,190
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.29	0.35	4.15	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	848	848	0.01	0.03	1.33	859
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.23	1.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	—	19.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.22	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Architectural Coatings	—	3.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.22	2.87	2.48	47.5	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,679	9,679	0.11	0.34	30.1	9,812
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.71	2.81	35.9	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	8,901	8,901	0.13	0.34	0.78	9,006
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.19	1.94	2.21	26.9	0.00	0.00	0.42	0.42	0.00	0.00	0.00	—	6,439	6,439	0.09	0.24	9.26	6,522
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.40	4.91	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,066	1,066	0.01	0.04	1.53	1,080
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.23	1.84	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	255	255	0.01	< 0.005	—	256
Architectural Coatings	—	19.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.23	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.2	42.2	< 0.005	< 0.005	—	42.4
Architectural Coatings	—	3.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.77	2.47	44.3	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,498	9,498	0.11	0.34	26.9	9,629
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.68	2.62	2.79	33.5	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	8,737	8,737	0.13	0.34	0.70	8,841
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.91	1.86	2.00	25.3	0.00	0.00	0.42	0.42	0.00	0.00	0.00	—	6,337	6,337	0.09	0.24	8.33	6,419
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.36	4.61	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,049	1,049	0.01	0.04	1.38	1,063
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.23	1.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	—	19.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.22	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Architectural Coatings	—	3.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.70	2.65	2.14	41.4	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,329	9,329	0.09	0.34	24.1	9,457
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.55	2.21	2.47	31.1	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	8,583	8,583	0.11	0.34	0.63	8,688
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.82	1.58	1.76	23.5	0.00	0.00	0.42	0.42	0.00	0.00	0.00	—	6,208	6,208	0.08	0.24	7.42	6,290
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.32	4.29	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,028	1,028	0.01	0.04	1.23	1,041
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.23	1.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	—	19.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.22	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Architectural Coatings	—	3.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.55	2.23	1.84	38.4	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,172	9,172	0.09	0.34	21.4	9,297
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.44	2.10	2.16	29.3	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	8,440	8,440	0.11	0.34	0.55	8,544
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.72	1.48	1.54	22.0	0.00	0.00	0.42	0.42	0.00	0.00	0.00	—	6,104	6,104	0.08	0.24	6.61	6,185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.27	0.28	4.01	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,011	1,011	0.01	0.04	1.09	1,024
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	1.72	2.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	—	27.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	1.07	1.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	221	221	0.01	< 0.005	—	222
Architectural Coatings	—	17.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.20	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Architectural Coatings	—	3.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.43	2.10	1.82	36.2	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	9,029	9,029	0.08	0.05	19.0	9,064
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.32	1.98	1.84	27.2	0.00	0.00	0.58	0.58	0.00	0.00	0.00	—	8,309	8,309	0.09	0.34	0.49	8,413
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.44	1.23	1.33	17.8	0.00	0.00	0.36	0.36	0.00	0.00	0.00	—	5,219	5,219	0.06	0.21	5.07	5,288
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.22	0.24	3.25	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	864	864	0.01	0.03	0.84	876
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	7/1/2023	3/9/2024	5.00	180	—
Grading	Grading	3/10/2024	12/20/2025	5.00	465	—
Building Construction	Building Construction	3/22/2026	11/13/2031	5.00	1,474	—
Paving	Paving	3/22/2026	11/13/2031	5.00	1,474	—
Architectural Coating	Architectural Coating	3/22/2026	11/13/2031	5.00	1,474	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Grading	Excavators	Diesel	Tier 4 Final	4.00	8.00	36.0	0.38

Grading	Graders	Diesel	Tier 4 Final	2.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	4.00	8.00	423	0.48
Building Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	6.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	2.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	4.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	4.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	4.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	2.00	8.00	37.0	0.48
Site Preparation	Crawler Tractors	Diesel	Tier 4 Final	8.00	8.00	87.0	0.43
Grading	Crawler Tractors	Diesel	Tier 4 Final	4.00	8.00	87.0	0.43

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	35.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	119	10.2	HHDT,MHDT
Site Preparation	Hauling	13.3	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	307	10.2	HHDT,MHDT

Grading	Hauling	13.3	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,575	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	974	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	715	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	12,812,049	4,270,683	171,975

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	19,221	0.00	1,260	0.00	—
Grading	49,656	0.00	3,720	0.00	—
Paving	0.00	0.00	0.00	0.00	65.8

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%
Manufacturing	0.00	0%
Industrial Park	0.00	0%
Free-Standing Discount Superstore	0.00	0%
Strip Mall	0.00	0%
Other Asphalt Surfaces	34.4	100%
Other Non-Asphalt Surfaces	31.4	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
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2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005
2030	0.00	532	0.03	< 0.005
2031	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.5	annual days of extreme heat
Extreme Precipitation	1.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	21.3	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
-----------	---------------------------------

Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	53.3
AQ-DPM	47.8
Drinking Water	10.2
Lead Risk Housing	22.0
Pesticides	58.8
Toxic Releases	37.7
Traffic	81.9
Effect Indicators	—
CleanUp Sites	69.4
Groundwater	0.00
Haz Waste Facilities/Generators	53.5
Impaired Water Bodies	0.00
Solid Waste	40.1
Sensitive Population	—
Asthma	65.6
Cardio-vascular	90.6
Low Birth Weights	62.9
Socioeconomic Factor Indicators	—
Education	74.7
Housing	57.9
Linguistic	53.4
Poverty	64.5
Unemployment	15.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.04516874
Employed	38.00846914
Median HI	53.00911074
Education	—
Bachelor's or higher	28.6154241
High school enrollment	100
Preschool enrollment	5.440780187
Transportation	—
Auto Access	94.58488387
Active commuting	6.723983062
Social	—
2-parent households	87.71974849
Voting	9.636853587
Neighborhood	—
Alcohol availability	84.04978827
Park access	11.88245862
Retail density	29.21852945
Supermarket access	12.06210702
Tree canopy	0.590273322
Housing	—
Homeownership	79.23777749
Housing habitability	40.67753112
Low-inc homeowner severe housing cost burden	12.19042731
Low-inc renter severe housing cost burden	27.61452586
Uncrowded housing	47.8121391

Health Outcomes	—
Insured adults	26.49813936
Arthritis	79.8
Asthma ER Admissions	42.9
High Blood Pressure	64.8
Cancer (excluding skin)	87.6
Asthma	27.9
Coronary Heart Disease	81.5
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	52.6
Life Expectancy at Birth	37.8
Cognitively Disabled	88.7
Physically Disabled	83.0
Heart Attack ER Admissions	7.5
Mental Health Not Good	28.5
Chronic Kidney Disease	64.9
Obesity	17.5
Pedestrian Injuries	92.5
Physical Health Not Good	37.9
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	25.4
No Leisure Time for Physical Activity	29.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	35.2
Elderly	90.4
English Speaking	42.3
Foreign-born	59.5
Outdoor Workers	11.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	72.4
Traffic Density	65.3
Traffic Access	23.0
Other Indices	—
Hardship	70.6
Other Decision Support	—
2016 Voting	23.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction schedule based on data provided by the Project team.
Construction: Off-Road Equipment	Construction equipment based on data from the Project team
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, and Building Construction.
Construction: Architectural Coatings	Per SCAQMD Rule 1113

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APPENDIX 4.2:

CALEEMOD PROJECT OPERATIONS EMISSIONS MODEL OUTPUTS

13265 Stoneridge With MCP Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	13265 Stoneridge With MCP
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	0.20
Location	33.823133630598434, -117.16971733141742
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5500
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	2,940	1000sqft	67.5	2,940,000	2,316,569	—	—	—
Unrefrigerated Warehouse-No Rail	4,050	1000sqft	93.0	4,049,616	0.00	—	—	—

Manufacturing	735	1000sqft	16.9	735,000	0.00	—	—	—
Industrial Park	562	1000sqft	12.9	561,924	0.00	—	—	—
User Defined Industrial	8,287	User Defined Unit	0.00	0.00	0.00	—	—	—
Free-Standing Discount Superstore	100	1000sqft	2.30	100,000	0.00	—	—	—
Strip Mall	26.5	1000sqft	0.61	26,542	0.00	—	—	—
Other Asphalt Surfaces	34.4	Acre	34.4	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	31.4	Acre	31.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	148	331	380	1,091	4.75	10.7	120	131	10.6	24.3	34.9	5,332	604,184	609,516	560	53.4	3,996	643,430
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	80.2	268	393	626	4.62	10.2	120	131	9.95	24.3	34.3	5,332	591,818	597,149	560	53.5	3,141	630,245
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	115	301	365	821	4.20	9.97	107	117	9.82	21.6	31.5	5,332	546,352	551,683	559	48.7	3,458	583,633
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.0	54.9	66.5	150	0.77	1.82	19.5	21.3	1.79	3.95	5.74	883	90,455	91,337	92.6	8.06	572	96,627

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	77.1	66.0	322	680	4.40	6.09	120	126	5.81	24.3	30.1	—	463,619	463,619	10.3	50.4	877	479,761
Area	65.2	262	3.08	366	0.02	0.49	—	0.49	0.65	—	0.65	—	1,505	1,505	0.06	0.14	—	1,549
Energy	6.00	3.00	54.5	45.8	0.33	4.14	—	4.14	4.14	—	4.14	—	137,203	137,203	14.9	1.23	—	137,941
Water	—	—	—	—	—	—	—	—	—	—	—	677	1,858	2,535	69.7	1.68	—	4,777
Waste	—	—	—	—	—	—	—	—	—	—	—	4,654	0.00	4,654	465	0.00	—	16,284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Total	148	331	380	1,091	4.75	10.7	120	131	10.6	24.3	34.9	5,332	604,184	609,516	560	53.4	3,996	643,430
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	74.2	63.2	338	581	4.30	6.09	120	126	5.81	24.3	30.1	—	452,757	452,757	10.5	50.6	22.8	468,124
Area	—	202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	6.00	3.00	54.5	45.8	0.33	4.14	—	4.14	4.14	—	4.14	—	137,203	137,203	14.9	1.23	—	137,941
Water	—	—	—	—	—	—	—	—	—	—	—	677	1,858	2,535	69.7	1.68	—	4,777
Waste	—	—	—	—	—	—	—	—	—	—	—	4,654	0.00	4,654	465	0.00	—	16,284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Total	80.2	268	393	626	4.62	10.2	120	131	9.95	24.3	34.3	5,332	591,818	597,149	560	53.5	3,141	630,245

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	64.7	54.8	308	524	3.85	5.49	107	112	5.24	21.6	26.9	—	406,260	406,260	9.35	45.7	339	420,451
Area	44.6	243	2.11	251	0.01	0.34	—	0.34	0.45	—	0.45	—	1,031	1,031	0.04	0.10	—	1,061
Energy	6.00	3.00	54.5	45.8	0.33	4.14	—	4.14	4.14	—	4.14	—	137,203	137,203	14.9	1.23	—	137,941
Water	—	—	—	—	—	—	—	—	—	—	—	677	1,858	2,535	69.7	1.68	—	4,777
Waste	—	—	—	—	—	—	—	—	—	—	—	4,654	0.00	4,654	465	0.00	—	16,284
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Total	115	301	365	821	4.20	9.97	107	117	9.82	21.6	31.5	5,332	546,352	551,683	559	48.7	3,458	583,633
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.8	10.0	56.2	95.7	0.70	1.00	19.5	20.5	0.96	3.95	4.90	—	67,261	67,261	1.55	7.57	56.1	69,610
Area	8.14	44.4	0.38	45.7	< 0.005	0.06	—	0.06	0.08	—	0.08	—	171	171	0.01	0.02	—	176
Energy	1.09	0.55	9.95	8.36	0.06	0.76	—	0.76	0.76	—	0.76	—	22,715	22,715	2.46	0.20	—	22,838
Water	—	—	—	—	—	—	—	—	—	—	—	112	308	420	11.5	0.28	—	791
Waste	—	—	—	—	—	—	—	—	—	—	—	771	0.00	771	77.0	0.00	—	2,696
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	516	516
Total	21.0	54.9	66.5	150	0.77	1.82	19.5	21.3	1.79	3.95	5.74	883	90,455	91,337	92.6	8.06	572	96,627

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	12.0	11.1	5.06	115	0.28	0.09	11.6	11.7	0.09	1.97	2.06	—	28,346	28,346	0.87	0.63	46.5	28,602
Unrefrigerated Warehouse-No Rail	19.2	17.8	8.13	184	0.45	0.15	18.6	18.8	0.14	3.17	3.31	—	45,567	45,567	1.40	1.01	74.7	45,978
Manufacturing	9.70	8.99	4.11	93.0	0.23	0.08	9.40	9.48	0.07	1.60	1.67	—	23,008	23,008	0.71	0.51	37.7	23,216
Industrial Park	4.79	4.44	2.03	45.9	0.11	0.04	4.64	4.68	0.03	0.79	0.82	—	11,359	11,359	0.35	0.25	18.6	11,461
User Defined Industrial	13.1	7.07	288	87.6	2.89	5.46	59.1	64.5	5.22	13.8	19.0	—	309,886	309,886	5.45	46.1	615	324,367
Free-Standing Discount Superstore	15.3	14.0	12.4	130	0.37	0.22	14.3	14.5	0.21	2.52	2.73	—	38,159	38,159	1.30	1.58	70.9	38,732
Strip Mall	2.93	2.68	2.37	24.8	0.07	0.04	2.73	2.77	0.04	0.48	0.52	—	7,295	7,295	0.25	0.30	13.6	7,404
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	77.1	66.0	322	680	4.40	6.09	120	126	5.81	24.3	30.1	—	463,619	463,619	10.3	50.4	877	479,761
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	11.5	10.6	5.58	95.0	0.26	0.09	11.6	11.7	0.09	1.97	2.06	—	26,202	26,202	0.91	0.67	1.21	26,426

Unrefrigerated	18.5	17.1	8.97	153	0.42	0.15	18.6	18.8	0.14	3.17	3.31	—	42,120	42,120	1.46	1.08	1.94	42,481
Manufacturing	9.34	8.62	4.53	77.1	0.21	0.08	9.40	9.48	0.07	1.60	1.67	—	21,268	21,268	0.74	0.55	0.98	21,450
Industrial Park	4.61	4.26	2.24	38.1	0.10	0.04	4.64	4.68	0.03	0.79	0.82	—	10,500	10,500	0.36	0.27	0.48	10,589
User Defined Industrial	12.8	6.79	301	88.2	2.89	5.46	59.1	64.5	5.23	13.8	19.0	—	309,994	309,994	5.44	46.1	16.0	323,884
Free-Standing Discount Superstore	14.6	13.3	13.3	109	0.35	0.22	14.3	14.5	0.21	2.52	2.73	—	35,825	35,825	1.34	1.62	1.84	36,345
Strip Mall	2.80	2.54	2.54	20.8	0.07	0.04	2.73	2.77	0.04	0.48	0.52	—	6,849	6,849	0.26	0.31	0.35	6,948
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	74.2	63.2	338	581	4.30	6.09	120	126	5.81	24.3	30.1	—	452,757	452,757	10.5	50.6	22.8	468,124
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	1.82	1.67	0.91	15.7	0.04	0.02	1.85	1.86	0.01	0.31	0.33	—	3,833	3,833	0.13	0.10	2.90	3,869
Unrefrigerated Warehouse-No Rail	3.13	2.89	1.58	27.1	0.07	0.03	3.19	3.21	0.02	0.54	0.57	—	6,616	6,616	0.23	0.17	5.01	6,678
Manufacturing	1.33	1.23	0.67	11.5	0.03	0.01	1.35	1.36	0.01	0.23	0.24	—	2,811	2,811	0.10	0.07	2.13	2,837
Industrial Park	0.73	0.67	0.37	6.31	0.02	0.01	0.74	0.75	0.01	0.13	0.13	—	1,538	1,538	0.05	0.04	1.16	1,553

User Defined Industrial	2.15	1.14	50.2	14.5	0.48	0.90	9.76	10.7	0.86	2.28	3.14	—	46,472	46,472	0.82	6.91	39.8	48,592
Free-Standing Discount Superstore	2.20	2.00	2.05	17.1	0.05	0.03	2.17	2.20	0.03	0.38	0.42	—	4,986	4,986	0.19	0.23	4.22	5,062
Strip Mall	0.44	0.40	0.41	3.45	0.01	0.01	0.44	0.44	0.01	0.08	0.08	—	1,005	1,005	0.04	0.05	0.85	1,020
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.8	10.0	56.2	95.7	0.70	1.00	19.5	20.5	0.96	3.95	4.90	—	67,261	67,261	1.55	7.57	56.1	69,610

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	45,939	45,939	5.81	0.70	—	46,294
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,316	13,316	1.69	0.20	—	13,419

Manufact	—	—	—	—	—	—	—	—	—	—	—	—	5,025	5,025	0.64	0.08	—	5,064
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	7,003	7,003	0.89	0.11	—	7,057
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	697	697	0.09	0.01	—	703
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	185	185	0.02	< 0.005	—	186
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	72,166	72,166	9.13	1.11	—	72,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	45,939	45,939	5.81	0.70	—	46,294
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,316	13,316	1.69	0.20	—	13,419
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	5,025	5,025	0.64	0.08	—	5,064
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	7,003	7,003	0.89	0.11	—	7,057

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	697	697	0.09	0.01	—	703
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	185	185	0.02	< 0.005	—	186
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	72,166	72,166	9.13	1.11	—	72,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,606	7,606	0.96	0.12	—	7,665
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,205	2,205	0.28	0.03	—	2,222
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	832	832	0.11	0.01	—	838
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,159	1,159	0.15	0.02	—	1,168
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	115	115	0.01	< 0.005	—	116
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	30.6	30.6	< 0.005	< 0.005	—	30.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,948	11,948	1.51	0.18	—	12,040

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	2.30	1.15	20.9	17.6	0.13	1.59	—	1.59	1.59	—	1.59	—	24,932	24,932	2.21	0.05	—	25,001
Unrefrigerated Warehouse-No Rail	2.28	1.14	20.8	17.4	0.12	1.58	—	1.58	1.58	—	1.58	—	24,779	24,779	2.19	0.05	—	24,847
Manufacturing	0.93	0.47	8.48	7.12	0.05	0.64	—	0.64	0.64	—	0.64	—	10,117	10,117	0.90	0.02	—	10,145
Industrial Park	0.46	0.23	4.16	3.50	0.02	0.32	—	0.32	0.32	—	0.32	—	4,968	4,968	0.44	0.01	—	4,982

User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	190	190	0.02	< 0.005	—	190
Strip Mall	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.4	50.4	< 0.005	< 0.005	—	50.5
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	6.00	3.00	54.5	45.8	0.33	4.14	—	4.14	4.14	—	4.14	—	65,036	65,036	5.76	0.12	—	65,217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	2.30	1.15	20.9	17.6	0.13	1.59	—	1.59	1.59	—	1.59	—	24,932	24,932	2.21	0.05	—	25,001
Unrefrigerated Warehouse-No Rail	2.28	1.14	20.8	17.4	0.12	1.58	—	1.58	1.58	—	1.58	—	24,779	24,779	2.19	0.05	—	24,847
Manufacturing	0.93	0.47	8.48	7.12	0.05	0.64	—	0.64	0.64	—	0.64	—	10,117	10,117	0.90	0.02	—	10,145
Industrial Park	0.46	0.23	4.16	3.50	0.02	0.32	—	0.32	0.32	—	0.32	—	4,968	4,968	0.44	0.01	—	4,982
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Free-Standing	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	190	190	0.02	< 0.005	—	190
Strip Mall	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.4	50.4	< 0.005	< 0.005	—	50.5
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	6.00	3.00	54.5	45.8	0.33	4.14	—	4.14	4.14	—	4.14	—	65,036	65,036	5.76	0.12	—	65,217
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.42	0.21	3.81	3.20	0.02	0.29	—	0.29	0.29	—	0.29	—	4,128	4,128	0.37	0.01	—	4,139
Unrefrigerated Warehouse-No Rail	0.42	0.21	3.79	3.18	0.02	0.29	—	0.29	0.29	—	0.29	—	4,102	4,102	0.36	0.01	—	4,114
Manufacturing	0.17	0.09	1.55	1.30	0.01	0.12	—	0.12	0.12	—	0.12	—	1,675	1,675	0.15	< 0.005	—	1,680
Industrial Park	0.08	0.04	0.76	0.64	< 0.005	0.06	—	0.06	0.06	—	0.06	—	823	823	0.07	< 0.005	—	825
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.4	31.4	< 0.005	< 0.005	—	31.5
Strip Mall	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.34	8.34	< 0.005	< 0.005	—	8.36
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.09	0.55	9.95	8.36	0.06	0.76	—	0.76	0.76	—	0.76	—	10,768	10,768	0.95	0.02	—	10,797

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	180	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	21.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	65.2	60.1	3.08	366	0.02	0.49	—	0.49	0.65	—	0.65	—	1,505	1,505	0.06	0.14	—	1,549
Total	65.2	262	3.08	366	0.02	0.49	—	0.49	0.65	—	0.65	—	1,505	1,505	0.06	0.14	—	1,549
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	180	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	21.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	32.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	3.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.14	7.52	0.38	45.7	< 0.005	0.06	—	0.06	0.08	—	0.08	—	171	171	0.01	0.02	—	176
Total	8.14	44.4	0.38	45.7	< 0.005	0.06	—	0.06	0.08	—	0.08	—	171	171	0.01	0.02	—	176

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	236	737	973	24.3	0.59	—	1,754
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	325	824	1,149	33.4	0.80	—	2,223
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	58.9	150	208	6.06	0.15	—	403

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	45.0	114	159	4.63	0.11	—	308
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	10.2	25.9	36.1	1.05	0.03	—	69.9
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.71	6.88	9.59	0.28	0.01	—	18.6
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	677	1,858	2,535	69.7	1.68	—	4,777
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	236	737	973	24.3	0.59	—	1,754
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	325	824	1,149	33.4	0.80	—	2,223
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	58.9	150	208	6.06	0.15	—	403
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	45.0	114	159	4.63	0.11	—	308

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	10.2	25.9	36.1	1.05	0.03	—	69.9
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.71	6.88	9.59	0.28	0.01	—	18.6
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	677	1,858	2,535	69.7	1.68	—	4,777
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	39.0	122	161	4.02	0.10	—	290
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	53.7	136	190	5.53	0.13	—	368
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	9.75	24.8	34.5	1.00	0.02	—	66.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	7.46	18.9	26.4	0.77	0.02	—	51.1
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	1.69	4.29	5.98	0.17	< 0.005	—	11.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.45	1.14	1.59	0.05	< 0.005	—	3.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	112	308	420	11.5	0.28	—	791

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,489	0.00	1,489	149	0.00	—	5,211
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2,052	0.00	2,052	205	0.00	—	7,178
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	491	0.00	491	49.1	0.00	—	1,719

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	376	0.00	376	37.5	0.00	—	1,314
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	232	0.00	232	23.2	0.00	—	811
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,654	0.00	4,654	465	0.00	—	16,284
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,489	0.00	1,489	149	0.00	—	5,211
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2,052	0.00	2,052	205	0.00	—	7,178
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	491	0.00	491	49.1	0.00	—	1,719
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	376	0.00	376	37.5	0.00	—	1,314

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	232	0.00	232	23.2	0.00	—	811
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	15.0	0.00	15.0	1.50	0.00	—	52.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,654	0.00	4,654	465	0.00	—	16,284
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	24.6	0.00	—	863
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	340	0.00	340	33.9	0.00	—	1,188
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	81.3	0.00	81.3	8.13	0.00	—	285
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	62.2	0.00	62.2	6.21	0.00	—	218
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.49	0.00	2.49	0.25	0.00	—	8.70
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	771	0.00	771	77.0	0.00	—	2,696

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.7	68.7
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52.5	52.5
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,997	2,997
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.7	68.7
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52.5	52.5
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.14	0.14
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,997	2,997
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,119	3,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.70	8.70
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

Refrigerated Warehouse Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	496	496
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	516	516

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Refrigerated Warehouse-No Rail	3,837	2,181	2,087	1,222,874	43,623	24,803	23,734	13,904,079
Unrefrigerated Warehouse-No Rail	6,168	4,860	4,783	2,110,741	70,125	55,253	54,378	23,999,123
Manufacturing	3,114	977	649	896,690	35,408	11,106	7,379	10,195,366
Industrial Park	1,537	1,159	566	490,751	17,481	13,174	6,434	5,579,840
User Defined Industrial	4,367	3,025	2,826	1,443,592	133,237	92,280	86,212	44,043,998
Free-Standing Discount Superstore	3,586	4,530	3,948	1,376,994	40,773	51,507	44,889	15,656,419
Strip Mall	866	669	325	277,588	9,847	7,602	3,694	3,156,177
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	12,619,623	4,206,541	171,975

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	64,296,476	261	0.0330	0.0040	77,795,496
Unrefrigerated Warehouse-No Rail	18,637,756	261	0.0330	0.0040	77,316,005
Manufacturing	7,033,267	261	0.0330	0.0040	31,568,490
Industrial Park	9,801,737	261	0.0330	0.0040	15,501,603
User Defined Industrial	0.00	261	0.0330	0.0040	0.00
Free-Standing Discount Superstore	975,839	261	0.0330	0.0040	592,217

Strip Mall	259,007	261	0.0330	0.0040	157,186
Other Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	122,985,990	36,730,848
Unrefrigerated Warehouse-No Rail	169,403,413	0.00
Manufacturing	30,746,498	0.00
Industrial Park	23,506,388	0.00
User Defined Industrial	0.00	0.00
Free-Standing Discount Superstore	5,329,267	0.00
Strip Mall	1,414,494	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	2,764	0.00
Unrefrigerated Warehouse-No Rail	3,807	0.00
Manufacturing	911	0.00
Industrial Park	697	0.00
User Defined Industrial	0.00	0.00

Free-Standing Discount Superstore	430	0.00
Strip Mall	27.9	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
Free-Standing Discount Superstore	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Free-Standing Discount Superstore	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Free-Standing Discount Superstore	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.5	annual days of extreme heat
Extreme Precipitation	1.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	21.3	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	53.3
AQ-DPM	47.8
Drinking Water	10.2
Lead Risk Housing	22.0
Pesticides	58.8
Toxic Releases	37.7
Traffic	81.9
Effect Indicators	—
CleanUp Sites	69.4
Groundwater	0.00
Haz Waste Facilities/Generators	53.5
Impaired Water Bodies	0.00
Solid Waste	40.1
Sensitive Population	—
Asthma	65.6
Cardio-vascular	90.6
Low Birth Weights	62.9
Socioeconomic Factor Indicators	—
Education	74.7
Housing	57.9

Linguistic	53.4
Poverty	64.5
Unemployment	15.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.04516874
Employed	38.00846914
Median HI	53.00911074
Education	—
Bachelor's or higher	28.6154241
High school enrollment	100
Preschool enrollment	5.440780187
Transportation	—
Auto Access	94.58488387
Active commuting	6.723983062
Social	—
2-parent households	87.71974849
Voting	9.636853587
Neighborhood	—
Alcohol availability	84.04978827
Park access	11.88245862
Retail density	29.21852945
Supermarket access	12.06210702
Tree canopy	0.590273322

Housing	—
Homeownership	79.23777749
Housing habitability	40.67753112
Low-inc homeowner severe housing cost burden	12.19042731
Low-inc renter severe housing cost burden	27.61452586
Uncrowded housing	47.8121391
Health Outcomes	—
Insured adults	26.49813936
Arthritis	79.8
Asthma ER Admissions	42.9
High Blood Pressure	64.8
Cancer (excluding skin)	87.6
Asthma	27.9
Coronary Heart Disease	81.5
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	52.6
Life Expectancy at Birth	37.8
Cognitively Disabled	88.7
Physically Disabled	83.0
Heart Attack ER Admissions	7.5
Mental Health Not Good	28.5
Chronic Kidney Disease	64.9
Obesity	17.5
Pedestrian Injuries	92.5
Physical Health Not Good	37.9
Stroke	70.4
Health Risk Behaviors	—

Binge Drinking	30.9
Current Smoker	25.4
No Leisure Time for Physical Activity	29.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	35.2
Elderly	90.4
English Speaking	42.3
Foreign-born	59.5
Outdoor Workers	11.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	72.4
Traffic Density	65.3
Traffic Access	23.0
Other Indices	—
Hardship	70.6
Other Decision Support	—
2016 Voting	23.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Trip rates based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate industrial passenger cars and trucks
Operations: Water and Waste Water	Water usage estimates based on Project WSA
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

13265 Stoneridge Without MCP Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	13265 Stoneridge Without MCP
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	0.20
Location	33.823133630598434, -117.16971733141742
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5500
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	2,940	1000sqft	67.5	2,940,000	2,316,569	—	—	—
Unrefrigerated Warehouse-No Rail	4,103	1000sqft	94.2	4,102,759	0.00	—	—	—

Manufacturing	735	1000sqft	16.9	735,000	0.00	—	—	—
Industrial Park	642	1000sqft	14.7	641,639	0.00	—	—	—
User Defined Industrial	8,419	User Defined Unit	0.00	0.00	0.00	—	—	—
Free-Standing Discount Superstore	100	1000sqft	2.30	100,000	0.00	—	—	—
Strip Mall	22.0	1000sqft	0.50	21,968	0.00	—	—	—
Other Asphalt Surfaces	34.4	Acre	34.4	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	31.4	Acre	31.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	150	336	386	1,103	4.82	10.9	122	133	10.8	24.6	35.4	5,419	612,730	618,149	569	54.3	4,015	652,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	80.9	272	399	632	4.69	10.4	122	132	10.1	24.6	34.7	5,419	600,266	605,685	569	54.4	3,149	639,275
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	117	305	370	830	4.25	10.1	108	118	9.97	21.9	31.9	5,419	553,914	559,333	568	49.5	3,469	591,746
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.3	55.7	67.5	151	0.78	1.85	19.7	21.6	1.82	4.00	5.82	897	91,707	92,604	94.1	8.19	574	97,970

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	77.7	66.5	327	685	4.46	6.19	122	128	5.90	24.6	30.5	—	469,958	469,958	10.4	51.2	889	486,359
Area	66.2	266	3.13	371	0.02	0.50	—	0.50	0.66	—	0.66	—	1,528	1,528	0.06	0.14	—	1,572
Energy	6.09	3.04	55.4	46.5	0.33	4.21	—	4.21	4.21	—	4.21	—	139,360	139,360	15.1	1.25	—	140,110
Water	—	—	—	—	—	—	—	—	—	—	—	687	1,884	2,571	70.7	1.70	—	4,847
Waste	—	—	—	—	—	—	—	—	—	—	—	4,732	0.00	4,732	473	0.00	—	16,556
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,126	3,126
Total	150	336	386	1,103	4.82	10.9	122	133	10.8	24.6	35.4	5,419	612,730	618,149	569	54.3	4,015	652,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	74.8	63.6	344	586	4.36	6.19	122	128	5.90	24.6	30.5	—	459,021	459,021	10.6	51.4	23.1	474,636
Area	—	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	6.09	3.04	55.4	46.5	0.33	4.21	—	4.21	4.21	—	4.21	—	139,360	139,360	15.1	1.25	—	140,110
Water	—	—	—	—	—	—	—	—	—	—	—	687	1,884	2,571	70.7	1.70	—	4,847
Waste	—	—	—	—	—	—	—	—	—	—	—	4,732	0.00	4,732	473	0.00	—	16,556
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,126	3,126
Total	80.9	272	399	632	4.69	10.4	122	132	10.1	24.6	34.7	5,419	600,266	605,685	569	54.4	3,149	639,275

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	65.2	55.2	313	529	3.90	5.57	108	114	5.31	21.9	27.2	—	411,623	411,623	9.45	46.4	343	426,030
Area	45.3	247	2.14	254	0.02	0.34	—	0.34	0.45	—	0.45	—	1,046	1,046	0.04	0.10	—	1,077
Energy	6.09	3.04	55.4	46.5	0.33	4.21	—	4.21	4.21	—	4.21	—	139,360	139,360	15.1	1.25	—	140,110
Water	—	—	—	—	—	—	—	—	—	—	—	687	1,884	2,571	70.7	1.70	—	4,847
Waste	—	—	—	—	—	—	—	—	—	—	—	4,732	0.00	4,732	473	0.00	—	16,556
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,126	3,126
Total	117	305	370	830	4.25	10.1	108	118	9.97	21.9	31.9	5,419	553,914	559,333	568	49.5	3,469	591,746
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.9	10.1	57.0	96.5	0.71	1.02	19.7	20.7	0.97	4.00	4.97	—	68,149	68,149	1.56	7.68	56.9	70,534
Area	8.27	45.0	0.39	46.4	< 0.005	0.06	—	0.06	0.08	—	0.08	—	173	173	0.01	0.02	—	178
Energy	1.11	0.56	10.1	8.49	0.06	0.77	—	0.77	0.77	—	0.77	—	23,073	23,073	2.50	0.21	—	23,197
Water	—	—	—	—	—	—	—	—	—	—	—	114	312	426	11.7	0.28	—	802
Waste	—	—	—	—	—	—	—	—	—	—	—	783	0.00	783	78.3	0.00	—	2,741
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	518	518
Total	21.3	55.7	67.5	151	0.78	1.85	19.7	21.6	1.82	4.00	5.82	897	91,707	92,604	94.1	8.19	574	97,970

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	12.0	11.1	5.06	115	0.28	0.09	11.6	11.7	0.09	1.97	2.06	—	28,346	28,346	0.87	0.63	46.5	28,602
Unrefrigerated Warehouse-No Rail	19.4	18.0	8.21	186	0.45	0.15	18.8	18.9	0.14	3.20	3.34	—	45,983	45,983	1.41	1.02	75.4	46,398
Manufacturing	9.70	8.99	4.11	93.0	0.23	0.08	9.40	9.48	0.07	1.60	1.67	—	23,008	23,008	0.71	0.51	37.7	23,216
Industrial Park	5.47	5.07	2.32	52.4	0.13	0.04	5.30	5.35	0.04	0.90	0.94	—	12,980	12,980	0.40	0.29	21.3	13,097
User Defined Industrial	13.4	7.19	293	89.1	2.94	5.56	60.1	65.7	5.32	14.0	19.3	—	315,451	315,451	5.55	46.9	626	330,193
Free-Standing Discount Superstore	15.3	14.0	12.4	130	0.37	0.22	14.3	14.5	0.21	2.52	2.73	—	38,159	38,159	1.30	1.58	70.9	38,732
Strip Mall	2.42	2.21	1.96	20.5	0.06	0.04	2.25	2.29	0.03	0.40	0.43	—	6,031	6,031	0.21	0.25	11.2	6,122
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	77.7	66.5	327	685	4.46	6.19	122	128	5.90	24.6	30.5	—	469,958	469,958	10.4	51.2	889	486,359
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	11.5	10.6	5.58	95.0	0.26	0.09	11.6	11.7	0.09	1.97	2.06	—	26,202	26,202	0.91	0.67	1.21	26,426

Unrefrigerated	18.7	17.2	9.05	154	0.42	0.15	18.8	18.9	0.14	3.20	3.34	—	42,505	42,505	1.47	1.09	1.96	42,869
Manufacturing	9.34	8.62	4.53	77.1	0.21	0.08	9.40	9.48	0.07	1.60	1.67	—	21,268	21,268	0.74	0.55	0.98	21,450
Industrial Park	5.27	4.86	2.56	43.5	0.12	0.04	5.30	5.35	0.04	0.90	0.94	—	11,998	11,998	0.42	0.31	0.55	12,100
User Defined Industrial	13.1	6.91	307	89.8	2.94	5.56	60.1	65.7	5.32	14.0	19.3	—	315,562	315,562	5.53	46.9	16.3	329,701
Free-Standing Discount Superstore	14.6	13.3	13.3	109	0.35	0.22	14.3	14.5	0.21	2.52	2.73	—	35,825	35,825	1.34	1.62	1.84	36,345
Strip Mall	2.31	2.10	2.10	17.2	0.06	0.04	2.25	2.29	0.03	0.40	0.43	—	5,662	5,662	0.21	0.26	0.29	5,745
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	74.8	63.6	344	586	4.36	6.19	122	128	5.90	24.6	30.5	—	459,021	459,021	10.6	51.4	23.1	474,636
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	1.82	1.67	0.91	15.7	0.04	0.02	1.85	1.86	0.01	0.31	0.33	—	3,834	3,834	0.13	0.10	2.90	3,869
Unrefrigerated Warehouse-No Rail	3.16	2.91	1.59	27.3	0.07	0.03	3.21	3.24	0.02	0.55	0.57	—	6,671	6,671	0.23	0.17	5.05	6,733
Manufacturing	1.33	1.23	0.67	11.5	0.03	0.01	1.35	1.36	0.01	0.23	0.24	—	2,811	2,811	0.10	0.07	2.13	2,837
Industrial Park	0.83	0.77	0.42	7.20	0.02	0.01	0.85	0.85	0.01	0.14	0.15	—	1,758	1,758	0.06	0.05	1.33	1,774

User Defined Industrial	2.18	1.16	51.0	14.7	0.49	0.92	9.93	10.8	0.88	2.31	3.19	—	47,260	47,260	0.83	7.03	40.5	49,415
Free-Standing Discount Superstore	2.20	2.00	2.05	17.1	0.05	0.03	2.17	2.20	0.03	0.38	0.42	—	4,986	4,986	0.19	0.23	4.22	5,062
Strip Mall	0.37	0.33	0.34	2.85	0.01	0.01	0.36	0.37	0.01	0.06	0.07	—	831	831	0.03	0.04	0.70	844
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.9	10.1	57.0	96.5	0.71	1.02	19.7	20.7	0.97	4.00	4.97	—	68,149	68,149	1.56	7.68	56.9	70,534

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	45,939	45,939	5.81	0.70	—	46,294
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,491	13,491	1.71	0.21	—	13,596

Manufact	—	—	—	—	—	—	—	—	—	—	—	—	5,025	5,025	0.64	0.08	—	5,064
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	7,997	7,997	1.01	0.12	—	8,059
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	697	697	0.09	0.01	—	703
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	153	153	0.02	< 0.005	—	154
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	73,303	73,303	9.28	1.12	—	73,869
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	45,939	45,939	5.81	0.70	—	46,294
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	13,491	13,491	1.71	0.21	—	13,596
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	5,025	5,025	0.64	0.08	—	5,064
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	7,997	7,997	1.01	0.12	—	8,059

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	697	697	0.09	0.01	—	703
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	153	153	0.02	< 0.005	—	154
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	73,303	73,303	9.28	1.12	—	73,869
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,606	7,606	0.96	0.12	—	7,665
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,234	2,234	0.28	0.03	—	2,251
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	832	832	0.11	0.01	—	838
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,324	1,324	0.17	0.02	—	1,334
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	115	115	0.01	< 0.005	—	116
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	25.4	25.4	< 0.005	< 0.005	—	25.6
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	12,136	12,136	1.54	0.19	—	12,230

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	2.30	1.15	20.9	17.6	0.13	1.59	—	1.59	1.59	—	1.59	—	24,932	24,932	2.21	0.05	—	25,001
Unrefrigerated Warehouse-No Rail	2.31	1.16	21.0	17.7	0.13	1.60	—	1.60	1.60	—	1.60	—	25,104	25,104	2.22	0.05	—	25,173
Manufacturing	0.93	0.47	8.48	7.12	0.05	0.64	—	0.64	0.64	—	0.64	—	10,117	10,117	0.90	0.02	—	10,145
Industrial Park	0.52	0.26	4.75	3.99	0.03	0.36	—	0.36	0.36	—	0.36	—	5,673	5,673	0.50	0.01	—	5,689

User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	190	190	0.02	< 0.005	—	190
Strip Mall	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.7	41.7	< 0.005	< 0.005	—	41.8
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	6.09	3.04	55.4	46.5	0.33	4.21	—	4.21	4.21	—	4.21	—	66,058	66,058	5.85	0.12	—	66,241
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	2.30	1.15	20.9	17.6	0.13	1.59	—	1.59	1.59	—	1.59	—	24,932	24,932	2.21	0.05	—	25,001
Unrefrigerated Warehouse-No Rail	2.31	1.16	21.0	17.7	0.13	1.60	—	1.60	1.60	—	1.60	—	25,104	25,104	2.22	0.05	—	25,173
Manufacturing	0.93	0.47	8.48	7.12	0.05	0.64	—	0.64	0.64	—	0.64	—	10,117	10,117	0.90	0.02	—	10,145
Industrial Park	0.52	0.26	4.75	3.99	0.03	0.36	—	0.36	0.36	—	0.36	—	5,673	5,673	0.50	0.01	—	5,689
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Free-Standing	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	190	190	0.02	< 0.005	—	190
Strip Mall	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.7	41.7	< 0.005	< 0.005	—	41.8
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	6.09	3.04	55.4	46.5	0.33	4.21	—	4.21	4.21	—	4.21	—	66,058	66,058	5.85	0.12	—	66,241
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.42	0.21	3.81	3.20	0.02	0.29	—	0.29	0.29	—	0.29	—	4,128	4,128	0.37	0.01	—	4,139
Unrefrigerated Warehouse-No Rail	0.42	0.21	3.84	3.23	0.02	0.29	—	0.29	0.29	—	0.29	—	4,156	4,156	0.37	0.01	—	4,168
Manufacturing	0.17	0.09	1.55	1.30	0.01	0.12	—	0.12	0.12	—	0.12	—	1,675	1,675	0.15	< 0.005	—	1,680
Industrial Park	0.10	0.05	0.87	0.73	0.01	0.07	—	0.07	0.07	—	0.07	—	939	939	0.08	< 0.005	—	942
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.4	31.4	< 0.005	< 0.005	—	31.5
Strip Mall	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.90	6.90	< 0.005	< 0.005	—	6.92
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	1.11	0.56	10.1	8.49	0.06	0.77	—	0.77	0.77	—	0.77	—	10,937	10,937	0.97	0.02	—	10,967

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	183	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	21.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	66.2	61.1	3.13	371	0.02	0.50	—	0.50	0.66	—	0.66	—	1,528	1,528	0.06	0.14	—	1,572
Total	66.2	266	3.13	371	0.02	0.50	—	0.50	0.66	—	0.66	—	1,528	1,528	0.06	0.14	—	1,572
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	183	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	21.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	205	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	33.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	4.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	8.27	7.63	0.39	46.4	< 0.005	0.06	—	0.06	0.08	—	0.08	—	173	173	0.01	0.02	—	178
Total	8.27	45.0	0.39	46.4	< 0.005	0.06	—	0.06	0.08	—	0.08	—	173	173	0.01	0.02	—	178

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	236	737	973	24.3	0.59	—	1,754
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	329	835	1,164	33.8	0.81	—	2,252
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	58.9	150	208	6.06	0.15	—	403

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	51.4	131	182	5.29	0.13	—	352
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	10.2	25.9	36.1	1.05	0.03	—	69.9
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.24	5.69	7.94	0.23	0.01	—	15.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	687	1,884	2,571	70.7	1.70	—	4,847
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	236	737	973	24.3	0.59	—	1,754
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	329	835	1,164	33.8	0.81	—	2,252
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	58.9	150	208	6.06	0.15	—	403
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	51.4	131	182	5.29	0.13	—	352

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	10.2	25.9	36.1	1.05	0.03	—	69.9
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.24	5.69	7.94	0.23	0.01	—	15.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	687	1,884	2,571	70.7	1.70	—	4,847
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	39.0	122	161	4.02	0.10	—	290
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	54.4	138	193	5.60	0.13	—	373
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	9.75	24.8	34.5	1.00	0.02	—	66.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	8.52	21.6	30.1	0.88	0.02	—	58.3
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	1.69	4.29	5.98	0.17	< 0.005	—	11.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.37	0.94	1.31	0.04	< 0.005	—	2.54
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	114	312	426	11.7	0.28	—	802

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,489	0.00	1,489	149	0.00	—	5,211
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2,078	0.00	2,078	208	0.00	—	7,272
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	491	0.00	491	49.1	0.00	—	1,719

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	429	0.00	429	42.9	0.00	—	1,500
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	232	0.00	232	23.2	0.00	—	811
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.4	0.00	12.4	1.24	0.00	—	43.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,732	0.00	4,732	473	0.00	—	16,556
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1,489	0.00	1,489	149	0.00	—	5,211
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	2,078	0.00	2,078	208	0.00	—	7,272
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	491	0.00	491	49.1	0.00	—	1,719
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	429	0.00	429	42.9	0.00	—	1,500

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	232	0.00	232	23.2	0.00	—	811
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.4	0.00	12.4	1.24	0.00	—	43.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,732	0.00	4,732	473	0.00	—	16,556
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	247	0.00	247	24.6	0.00	—	863
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	344	0.00	344	34.4	0.00	—	1,204
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	81.3	0.00	81.3	8.13	0.00	—	285
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	71.0	0.00	71.0	7.10	0.00	—	248
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	38.4	0.00	38.4	3.84	0.00	—	134
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.06	0.00	2.06	0.21	0.00	—	7.20
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	783	0.00	783	78.3	0.00	—	2,741

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,997	2,997
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.7	68.7
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.0	60.0
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11	0.11
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,126	3,126
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,997	2,997
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	68.7	68.7
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.0	60.0
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.52	0.52
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.11	0.11
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,126	3,126
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	496	496
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.4
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.93	9.93
Free-Standing Discount Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	518	518
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4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily, Winter (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Annual	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily, Winter (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Annual	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
---------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Refrigerated Warehouse-No Rail	3,837	2,181	2,090	1,223,027	43,623	24,803	23,767	13,905,822
Unrefrigerated Warehouse-No Rail	6,224	4,886	4,808	2,128,171	70,766	55,558	54,672	24,197,309
Manufacturing	3,114	977	649	896,690	35,408	11,106	7,379	10,195,366
Industrial Park	1,757	1,324	646	560,737	19,975	15,050	7,347	6,375,585
User Defined Industrial	4,445	3,073	2,854	1,468,054	135,630	93,760	87,081	44,790,338
Free-Standing Discount Superstore	3,586	4,530	3,948	1,376,994	40,773	51,507	44,889	15,656,419
Strip Mall	716	553	269	229,505	8,141	6,285	3,055	2,609,471
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	12,812,049	4,270,683	171,975

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	64,296,476	261	0.0330	0.0040	77,795,496
Unrefrigerated Warehouse-No Rail	18,882,339	261	0.0330	0.0040	78,330,620
Manufacturing	7,033,267	261	0.0330	0.0040	31,568,490
Industrial Park	11,192,220	261	0.0330	0.0040	17,700,673
User Defined Industrial	0.00	261	0.0330	0.0040	0.00
Free-Standing Discount Superstore	975,839	261	0.0330	0.0040	592,217
Strip Mall	214,372	261	0.0330	0.0040	130,098
Other Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	122,985,990	36,730,848
Unrefrigerated Warehouse-No Rail	171,626,489	0.00
Manufacturing	30,746,498	0.00
Industrial Park	26,841,023	0.00
User Defined Industrial	0.00	0.00
Free-Standing Discount Superstore	5,329,267	0.00
Strip Mall	1,170,733	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	2,764	0.00
Unrefrigerated Warehouse-No Rail	3,857	0.00
Manufacturing	911	0.00
Industrial Park	796	0.00
User Defined Industrial	0.00	0.00
Free-Standing Discount Superstore	430	0.00
Strip Mall	23.1	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0
Manufacturing	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
Free-Standing Discount Superstore	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Free-Standing Discount Superstore	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Free-Standing Discount Superstore	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.5	annual days of extreme heat
Extreme Precipitation	1.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	21.3	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
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Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	53.3
AQ-DPM	47.8
Drinking Water	10.2
Lead Risk Housing	22.0
Pesticides	58.8
Toxic Releases	37.7
Traffic	81.9
Effect Indicators	—
CleanUp Sites	69.4
Groundwater	0.00
Haz Waste Facilities/Generators	53.5
Impaired Water Bodies	0.00
Solid Waste	40.1
Sensitive Population	—
Asthma	65.6
Cardio-vascular	90.6
Low Birth Weights	62.9
Socioeconomic Factor Indicators	—
Education	74.7
Housing	57.9
Linguistic	53.4
Poverty	64.5
Unemployment	15.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.04516874
Employed	38.00846914
Median HI	53.00911074
Education	—
Bachelor's or higher	28.6154241
High school enrollment	100
Preschool enrollment	5.440780187
Transportation	—
Auto Access	94.58488387
Active commuting	6.723983062
Social	—
2-parent households	87.71974849
Voting	9.636853587
Neighborhood	—
Alcohol availability	84.04978827
Park access	11.88245862
Retail density	29.21852945
Supermarket access	12.06210702
Tree canopy	0.590273322
Housing	—
Homeownership	79.23777749
Housing habitability	40.67753112
Low-inc homeowner severe housing cost burden	12.19042731
Low-inc renter severe housing cost burden	27.61452586
Uncrowded housing	47.8121391

Health Outcomes	—
Insured adults	26.49813936
Arthritis	79.8
Asthma ER Admissions	42.9
High Blood Pressure	64.8
Cancer (excluding skin)	87.6
Asthma	27.9
Coronary Heart Disease	81.5
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	52.6
Life Expectancy at Birth	37.8
Cognitively Disabled	88.7
Physically Disabled	83.0
Heart Attack ER Admissions	7.5
Mental Health Not Good	28.5
Chronic Kidney Disease	64.9
Obesity	17.5
Pedestrian Injuries	92.5
Physical Health Not Good	37.9
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	30.9
Current Smoker	25.4
No Leisure Time for Physical Activity	29.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	35.2
Elderly	90.4
English Speaking	42.3
Foreign-born	59.5
Outdoor Workers	11.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	72.4
Traffic Density	65.3
Traffic Access	23.0
Other Indices	—
Hardship	70.6
Other Decision Support	—
2016 Voting	23.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Trip rates based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate industrial passenger cars and trucks
Operations: Water and Waste Water	Water usage estimates based on Project WSA
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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APPENDIX 4.3:

EMFAC2021

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar	Vehicle Cat	Model Year	Speed	Fuel	Population	Total VMT	Fuel_Consumption	Fuel_Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Gasoline	9.455104489	402.0155083	0.108573531	108.5735307	317785.1606	402.0155083	1920248.354	6.04	HHDT
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Diesel	14188.53655	1870417.715	309.6254593	309625.4593		1870417.715			
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Electricity	10.75839329	733.8118529	0	0		733.8118529			
Riverside (SC)	2023	HHDT	Aggregate	Aggregate	Natural Gas	693.7983116	48694.81207	8.051127696	8051.127696		48694.81207			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Gasoline	469124.6474	20366451.54	699.7310812	699731.0812	711067.1515	20366451.54	21760170.77	30.60	LDA
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Diesel	1558.762895	58561.51523	1.375784729	1375.784729		58561.51523			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Electricity	16185.78734	744565.1808	0	0		744565.1808			
Riverside (SC)	2023	LDA	Aggregate	Aggregate	Plug-in Hybr	11651.42905	590592.5329	9.960285645	9960.285645		590592.5329			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Gasoline	41569.09002	1542689.764	63.99950114	63999.50114	64044.29373	1542689.764	1546785.932	24.15	LDT1
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Diesel	20.22700504	383.6181372	0.015644241	15.64424123		383.6181372			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Electricity	42.93918941	1813.231309	0	0		1813.231309			
Riverside (SC)	2023	LDT1	Aggregate	Aggregate	Plug-in Hybr	33.25263876	1899.318283	0.029148352	29.14835174		1899.318283			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Gasoline	191587.7811	8435118.12	356.5641957	356564.1957	358545.5463	8435118.12	8562709.114	23.88	LDT2
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Diesel	577.8339592	27328.90025	0.849494989	849.4949888		27328.90025			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Electricity	816.9774193	29520.94571	0	0		29520.94571			
Riverside (SC)	2023	LDT2	Aggregate	Aggregate	Plug-in Hybr	1285.022226	70741.14871	1.131855657	1131.855657		70741.14871			
Riverside (SC)	2023	LHDT1	Aggregate	Aggregate	Gasoline	18052.34987	656605.5887	49.73832228	49738.32228	77417.67097	656605.5887	1224140.947	15.81	LHDT1
Riverside (SC)	2023	LHDT1	Aggregate	Aggregate	Diesel	15395.69696	567535.3588	27.67934868	27679.34868		567535.3588			
Riverside (SC)	2023	LHDT2	Aggregate	Aggregate	Gasoline	2523.570585	90490.65997	7.611904144	7611.904144	22679.23434	90490.65997	346711.8059	15.29	LHDT2
Riverside (SC)	2023	LHDT2	Aggregate	Aggregate	Diesel	6852.470307	256221.1459	15.0673302	15067.3302		256221.1459			
Riverside (SC)	2023	MCY	Aggregate	Aggregate	Gasoline	24170.7213	141523.0693	3.403298812	3403.298812	3403.298812	141523.0693	141523.0693	41.58	MCY
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Gasoline	159138.1322	6456725.347	338.8355886	338835.5886	344047.395	6456725.347	6637695.092	19.29	MDV
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Diesel	2483.005938	104140.6313	4.4577137	4457.7137		104140.6313			
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Electricity	897.1539487	32338.42861	0	0		32338.42861			
Riverside (SC)	2023	MDV	Aggregate	Aggregate	Plug-in Hybr	887.9224631	44490.68605	0.754092705	754.0927053		44490.68605			
Riverside (SC)	2023	MH	Aggregate	Aggregate	Gasoline	5083.841078	44617.33224	9.135457245	9135.457245	10873.77525	44617.33224	62635.35904	5.76	MH
Riverside (SC)	2023	MH	Aggregate	Aggregate	Diesel	2073.70666	18018.02681	1.738318002	1738.318002		18018.02681			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Gasoline	1260.142241	50001.99826	9.730848023	9730.848023	72860.34533	50001.99826	613586.1262	8.42	MHDT
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Diesel	12683.243	556347.8969	62.32189585	62321.89585		556347.8969			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Electricity	4.9202908	108.4971152	0	0		108.4971152			
Riverside (SC)	2023	MHDT	Aggregate	Aggregate	Natural Gas	147.6204682	7127.733974	0.807601459	807.6014589		7127.733974			
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Gasoline	386.6813181	13386.35665	2.645844907	2645.844907	4805.404855	13386.35665	30497.76136	6.35	OBUS
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Diesel	215.667787	15076.44179	1.951877039	1951.877039		15076.44179			
Riverside (SC)	2023	OBUS	Aggregate	Aggregate	Natural Gas	33.12387867	2034.962916	0.207682909	207.6829092		2034.962916			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Gasoline	421.1646074	16563.24745	1.897862822	1897.862822	5896.748986	16563.24745	37701.28126	6.39	SBUS
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Diesel	499.0687276	10519.58678	1.437331357	1437.331357		10519.58678			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Electricity	0.562315788	6.53322339	0	0		6.53322339			
Riverside (SC)	2023	SBUS	Aggregate	Aggregate	Natural Gas	428.0776414	10611.9138	2.561554808	2561.554808		10611.9138			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Gasoline	145.9294435	18476.36382	3.28009086	3280.09086	11107.60554	18476.36382	49531.64193	4.46	UBUS
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002674589	2.674588852		30.10971099			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Electricity	0.030745281	2.969621933	0	0		2.969621933			
Riverside (SC)	2023	UBUS	Aggregate	Aggregate	Natural Gas	251.677147	31022.19878	7.824840087	7824.840087		31022.19878			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Gasoline	7.589475903	347.9694468	0.092181	92.180823	321404.96	347.96945	1967302.751	6.12	HHDT
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Diesel	14792.02338	1911347.779	313.044	313043.98		1911347.8			
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Electricity	47.99547895	5148.201829	0	0		5148.2018			
Riverside (SC)	2024	HHDT	Aggregate	Aggregate	Natural Gas	740.0705237	50458.80082	8.268807	8268.807		50458.801			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Gasoline	469145.3818	20418129.53	688.4837	688483.66	700469.61	20418130	22069128.65	31.51	LDA
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Diesel	1473.049219	54327.45303	1.267189	1267.1888		54327.453			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Electricity	19934.69439	945704.6798	0	0		945704.68			
Riverside (SC)	2024	LDA	Aggregate	Aggregate	Plug-in Hybr	12893.65575	650966.9876	10.71876	10718.763		650966.99			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Gasoline	40643.24621	1523061.246	62.04625	62046.247	62104.325	1523061.2	1529163.988	24.62	LDT1
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Diesel	18.16927182	339.6979643	0.013831	13.831102		339.69796			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Electricity	60.98632141	2789.967089	0	0		2789.9671			
Riverside (SC)	2024	LDT1	Aggregate	Aggregate	Plug-in Hybr	52.35545177	2973.077776	0.044247	44.247357		2973.0778			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Gasoline	196761.1569	8732860.794	359.6747	359674.68	361927.38	8732860.8	8893408.735	24.57	LDT2
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Diesel	611.2140627	29007.74721	0.880423	880.42307		29007.747			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Electricity	1212.721837	43455.52608	0	0		43455.526			
Riverside (SC)	2024	LDT2	Aggregate	Aggregate	Plug-in Hybr	1617.209463	88084.6679	1.372274	1372.2738		88084.668			
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Gasoline	17828.73734	656766.0119	48.36248	48362.476	75554.206	656766.01	1221087.42	16.16	LHDT1
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Diesel	15247.60565	560367.9206	27.19173	27191.731		560367.92			
Riverside (SC)	2024	LHDT1	Aggregate	Aggregate	Electricity	53.50587181	3953.487241	0	0		3953.4872			
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Gasoline	2494.679179	89754.81853	7.387432	7387.4317	22224.411	89754.819	344827.7113	15.52	LHDT2
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Diesel	6844.928194	254103.3578	14.83698	14836.979		254103.36			
Riverside (SC)	2024	LHDT2	Aggregate	Aggregate	Electricity	13.8489928	969.5349487	0	0		969.53495			
Riverside (SC)	2024	MCY	Aggregate	Aggregate	Gasoline	24077.0623	140258.0803	3.359218	3359.2179	3359.2179	140258.08	140258.0803	41.75	MCY
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Gasoline	158529.7591	6468418.76	332.0737	332073.69	337278.19	6468418.8	6673535.232	19.79	MDV
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Diesel	2456.219583	102039.6434	4.306633	4306.633		102039.64			
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Electricity	1347.135818	48185.7285	0	0		48185.729			
Riverside (SC)	2024	MDV	Aggregate	Aggregate	Plug-in Hybr	1094.492843	54891.09982	0.897864	897.86413		54891.1			
Riverside (SC)	2024	MH	Aggregate	Aggregate	Gasoline	4781.777946	41623.53594	8.518926	8518.9264	10212.975	41623.536	59176.14669	5.79	MH
Riverside (SC)	2024	MH	Aggregate	Aggregate	Diesel	2046.063726	17552.61075	1.694048	1694.0483		17552.611			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Gasoline	1238.0029	49965.95549	9.588667	9588.6666	73502.732	49965.955	624307.4842	8.49	MHDT
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Diesel	12954.3675	564761.4751	63.06415	63064.145		564761.48			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Electricity	40.46425607	2074.722372	0	0		2074.7224			
Riverside (SC)	2024	MHDT	Aggregate	Aggregate	Natural Gas	158.0466253	7505.331205	0.84992	849.92038		7505.3312			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Gasoline	374.6153087	12781.812	2.496601	2496.6014	4662.38	12781.812	30088.9967	6.45	OBUS
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Diesel	219.2789175	15140.91273	1.951182	1951.1816		15140.913			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Electricity	0.821516166	55.60331633	0	0		55.603316			
Riverside (SC)	2024	OBUS	Aggregate	Aggregate	Natural Gas	34.6553722	2110.668656	0.214597	214.59728		2110.6687			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Gasoline	423.5817437	16753.46749	1.914822	1914.8218	5918.222	16753.467	37909.3201	6.41	SBUS
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Diesel	491.8063992	10225.99182	1.394926	1394.9256		10225.992			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Electricity	2.445505521	61.99924762	0	0		61.999248			
Riverside (SC)	2024	SBUS	Aggregate	Aggregate	Natural Gas	443.1589434	10867.86154	2.608475	2608.4745		10867.862			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Gasoline	146.2127201	18511.1132	3.282633	3282.6331	11054.35	18511.113	49631.8201	4.49	UBUS
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675	2.675115		30.109711			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Electricity	0.120004951	18.36371585	0	0		18.363716			
Riverside (SC)	2024	UBUS	Aggregate	Aggregate	Natural Gas	252.109466	31072.23347	7.769046	7769.0456		31072.233			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Gasoline	6.232252524	303.889871	0.078876	78.875502	324061.93	303.88987	2014903.459	6.22	HHDT
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Diesel	15281.49903	1950611.476	315.5183	315518.25		1950611.5			
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Electricity	103.9487733	11894.93596	0	0		11894.936			
Riverside (SC)	2025	HHDT	Aggregate	Aggregate	Natural Gas	781.6601067	52093.15724	8.464804	8464.8041		52093.157			
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Gasoline	469318.5342	20373765.83	673.3165	673316.54	685799.58	20373766	22281991.59	32.49	LDA
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Diesel	1383.809245	49996.02059	1.157205	1157.2049		49996.021			
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Electricity	23756.17576	1153396.904	0	0		1153396.9			
Riverside (SC)	2025	LDA	Aggregate	Aggregate	Plug-in Hybr	14087.23202	704832.8394	11.32583	11325.832		704832.84			
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Gasoline	39844.42885	1499609.575	59.92078	59920.782	59994.793	1499609.6	1508277.871	25.14	LDT1
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Diesel	16.26032827	298.1728862	0.012132	12.131898		298.17289			
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Electricity	84.57619148	4089.475353	0	0		4089.4754			
Riverside (SC)	2025	LDT1	Aggregate	Aggregate	Plug-in Hybr	76.19034646	4280.647946	0.061879	61.879155		4280.6479			
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Gasoline	201900.7772	8973973.952	360.0166	360016.56	362521.44	8973974	9168424.554	25.29	LDT2
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Diesel	648.0824816	30519.42791	0.906087	906.08704		30519.428			
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Electricity	1658.408696	58637.73041	0	0		58637.73			
Riverside (SC)	2025	LDT2	Aggregate	Aggregate	Plug-in Hybr	1963.286623	105293.4446	1.598791	1598.7914		105293.44			
Riverside (SC)	2025	LHDT1	Aggregate	Aggregate	Gasoline	17598.36242	652458.21	46.82733	46827.329	73403.799	652458.21	1212550.7	16.52	LHDT1
Riverside (SC)	2025	LHDT1	Aggregate	Aggregate	Diesel	15075.59282	549831.8274	26.57647	26576.47		549831.83			
Riverside (SC)	2025	LHDT1	Aggregate	Aggregate	Electricity	149.6982853	10260.66293	0	0		10260.663			
Riverside (SC)	2025	LHDT2	Aggregate	Aggregate	Gasoline	2462.303572	88408.90183	7.133201	7133.2007	21661.355	88408.902	341190.0394	15.75	LHDT2
Riverside (SC)	2025	LHDT2	Aggregate	Aggregate	Diesel	6820.445818	250292.8301	14.52815	14528.154		250292.83			
Riverside (SC)	2025	LHDT2	Aggregate	Aggregate	Electricity	38.18158868	2488.307475	0	0		2488.3075			
Riverside (SC)	2025	MCY	Aggregate	Aggregate	Gasoline	24005.46384	138549.7935	3.30755	3307.5496	3307.5496	138549.79	138549.7935	41.89	MCY
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Gasoline	157992.5704	6448292.677	323.4938	323493.82	328676.51	6448292.7	6678432.543	20.32	MDV
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Diesel	2427.253752	99526.12558	4.137752	4137.7524		99526.126			
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Electricity	1830.142844	64565.5975	0	0		64565.598			
Riverside (SC)	2025	MDV	Aggregate	Aggregate	Plug-in Hybr	1324.504282	66048.14278	1.04494	1044.9396		66048.143			
Riverside (SC)	2025	MH	Aggregate	Aggregate	Gasoline	4508.467531	38795.29207	7.939176	7939.1755	9582.2687	38795.292	55815.16631	5.82	MH
Riverside (SC)	2025	MH	Aggregate	Aggregate	Diesel	2015.081247	17019.87424	1.643093	1643.0931		17019.874			
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Gasoline	1219.56756	49718.98291	9.418017	9418.017	73843.63	49718.983	635118.1523	8.60	MHDT
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Diesel	13275.74248	571359.1019	63.53271	63532.713		571359.1			
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Electricity	118.7135177	6143.919124	0	0		6143.9191			
Riverside (SC)	2025	MHDT	Aggregate	Aggregate	Natural Gas	169.7860028	7896.148358	0.8929	892.89982		7896.1484			
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Gasoline	362.5102847	12151.28279	2.347951	2347.9507	4510.759	12151.283	29688.0455	6.58	OBUS
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Diesel	224.9321911	15183.67961	1.94077	1940.7697		15183.68			
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Electricity	2.021694394	134.2617193	0	0		134.26172			
Riverside (SC)	2025	OBUS	Aggregate	Aggregate	Natural Gas	36.9521167	2218.821339	0.222038	222.03847		2218.8213			
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Gasoline	426.2067312	16859.59503	1.923043	1923.0435	5926.536	16859.595	38036.5897	6.42	SBUS
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Diesel	483.8964136	9931.139032	1.352394	1352.3944		9931.139			
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Electricity	5.22909553	143.1587763	0	0		143.15878			
Riverside (SC)	2025	SBUS	Aggregate	Aggregate	Natural Gas	457.8096259	11102.69686	2.651098	2651.0983		11102.697			
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Gasoline	146.4959788	18545.85863	3.288543	3288.5432	10964.45	18545.859	49731.9983	4.54	UBUS
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675	2.675115		30.109711			
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Electricity	0.20926462	33.75780976	0	0		33.75781			
Riverside (SC)	2025	UBUS	Aggregate	Aggregate	Natural Gas	252.5418031	31122.27213	7.673228	7673.2282		31122.272			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2026

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Gasoline	5.301713201	269.8155783	0.06847	68.469804	326183.33	269.81558	2063431.007	6.33	HHDT
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Diesel	15687.78827	1988453.103	317.4312	317431.18		1988453.1			
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Electricity	181.0556624	20854.79688	0	0		20854.797			
Riverside (SC)	2026	HHDT	Aggregate	Aggregate	Natural Gas	822.9858358	53853.29132	8.683681	8683.6814		53853.291			
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Gasoline	470220.2179	20338993.18	657.902	657901.98	670683.72	20338993	22423581.77	33.43	LDA
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Diesel	1278.903087	45656.81459	1.044466	1044.4663		45656.815			
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Electricity	27110.24505	1294343.513	0	0		1294343.5			
Riverside (SC)	2026	LDA	Aggregate	Aggregate	Plug-in Hybr	15111.22646	744588.2646	11.73728	11737.28		744588.26			
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Gasoline	39097.73904	1475770.596	57.77065	57770.654	57860.52	1475770.6	1487146.031	25.70	LDT1
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Diesel	13.62192751	246.3725383	0.00996	9.9601737		246.37254			
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Electricity	113.2552136	5510.233656	0	0		5510.2337			
Riverside (SC)	2026	LDT1	Aggregate	Aggregate	Plug-in Hybr	101.686721	5618.828531	0.079906	79.905828		5618.8285			
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Gasoline	207104.2919	9189016.153	359.2464	359246.4	361967.93	9189016.2	9414279.735	26.01	LDT2
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Diesel	682.5626595	31821.71127	0.923869	923.86894		31821.711			
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Electricity	2094.273367	72949.08151	0	0		72949.082			
Riverside (SC)	2026	LDT2	Aggregate	Aggregate	Plug-in Hybr	2291.195555	120492.7893	1.79766	1797.6597		120492.79			
Riverside (SC)	2026	LHDT1	Aggregate	Aggregate	Gasoline	17398.34216	648258.6134	45.4323	45432.303	71378.104	648258.61	1205852.586	16.89	LHDT1
Riverside (SC)	2026	LHDT1	Aggregate	Aggregate	Diesel	14868.32038	538771.2685	25.9458	25945.801		538771.27			
Riverside (SC)	2026	LHDT1	Aggregate	Aggregate	Electricity	286.9935654	18822.70429	0	0		18822.704			
Riverside (SC)	2026	LHDT2	Aggregate	Aggregate	Gasoline	2430.034218	87077.56554	6.89465	6894.65	21104.053	87077.566	337819.1023	16.01	LHDT2
Riverside (SC)	2026	LHDT2	Aggregate	Aggregate	Diesel	6777.719033	246178.6334	14.2094	14209.403		246178.63			
Riverside (SC)	2026	LHDT2	Aggregate	Aggregate	Electricity	73.06243174	4562.903373	0	0		4562.9034			
Riverside (SC)	2026	MCY	Aggregate	Aggregate	Gasoline	23937.33086	137142.5787	3.259851	3259.851	3259.851	137142.58	137142.5787	42.07	MCY
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Gasoline	157654.7501	6425602.492	314.7102	314710.24	319841.94	6425602.5	6678197.896	20.88	MDV
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Diesel	2395.180805	96875.32958	3.958815	3958.8154		96875.33			
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Electricity	2298.450518	79855.22944	0	0		79855.229			
Riverside (SC)	2026	MDV	Aggregate	Aggregate	Plug-in Hybr	1539.714974	75864.84529	1.172889	1172.8887		75864.845			
Riverside (SC)	2026	MH	Aggregate	Aggregate	Gasoline	4250.734566	36312.00617	7.42587	7425.87	9021.5335	36312.006	52833.22222	5.86	MH
Riverside (SC)	2026	MH	Aggregate	Aggregate	Diesel	1981.725027	16521.21606	1.595663	1595.6635		16521.216			
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Gasoline	1204.155669	49534.83957	9.263997	9263.9974	74067.749	49534.84	646239.7348	8.72	MHDT
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Diesel	13571.64646	577213.7586	63.87136	63871.357		577213.76			
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Electricity	219.063018	11241.81607	0	0		11241.816			
Riverside (SC)	2026	MHDT	Aggregate	Aggregate	Natural Gas	180.8134913	8249.320573	0.932395	932.39497		8249.3206			
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Gasoline	350.9276772	11597.74291	2.216471	2216.4715	4375.819	11597.743	29375.1858	6.71	OBUS
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Diesel	230.0918445	15233.6578	1.930307	1930.3072		15233.658			
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Electricity	3.398598414	222.0634986	0	0		222.0635			
Riverside (SC)	2026	OBUS	Aggregate	Aggregate	Natural Gas	39.09901647	2321.721637	0.22904	229.04033		2321.7216			
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Gasoline	428.6165302	16957.83533	1.930418	1930.418	5931.11	16957.835	38160.1699	6.43	SBUS
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Diesel	474.8674611	9627.108018	1.308587	1308.587		9627.108			
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Electricity	8.960082283	245.5300912	0	0		245.53009			
Riverside (SC)	2026	SBUS	Aggregate	Aggregate	Natural Gas	472.4302591	11329.69641	2.692105	2692.1051		11329.696			
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Gasoline	146.7792196	18580.60009	3.253157	3253.1569	10939.26	18580.6	49832.1764	4.56	UBUS
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675	2.675115		30.109711			
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Electricity	0.298524289	49.15190367	0	0		49.151904			
Riverside (SC)	2026	UBUS	Aggregate	Aggregate	Natural Gas	252.9741581	31172.31474	7.683424	7683.424		31172.315			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Gasoline	4.417589037	240.8696114	0.059741	59.741457	327553.12	240.86961	2112996.232	6.45	HHDT
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Diesel	16021.09962	2023648.424	318.642	318641.99		2023648.4			
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Electricity	291.1277388	33695.26576	0	0		33695.266			
Riverside (SC)	2027	HHDT	Aggregate	Aggregate	Natural Gas	859.7365707	55411.6726	8.85139	8851.3902		55411.673			
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Gasoline	471235.7168	20354484.89	646.3182	646318.23	659332.17	20354485	22605957.54	34.29	LDA
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Diesel	1176.545459	41562.34596	0.941773	941.77279		41562.346			
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Electricity	30348.88532	1428770.722	0	0		1428770.7			
Riverside (SC)	2027	LDA	Aggregate	Aggregate	Plug-in Hybr	16056.71591	781139.586	12.07216	12072.164		781139.59			
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Gasoline	38425.04641	1456606.871	56.00412	56004.115	56110.218	1456606.9	1471112.371	26.22	LDT1
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Diesel	8.182997029	149.5948697	0.005862	5.8619317		149.59487			
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Electricity	147.7776311	7209.101259	0	0		7209.1013			
Riverside (SC)	2027	LDT1	Aggregate	Aggregate	Plug-in Hybr	130.963565	7146.803489	0.10024	100.2402		7146.8035			
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Gasoline	212339.9735	9414153.484	360.2721	360272.05	363211.88	9414153.5	9671400.198	26.63	LDT2
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Diesel	713.6192887	33073.61643	0.942826	942.82609		33073.616			
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Electricity	2564.171691	88062.50525	0	0		88062.505			
Riverside (SC)	2027	LDT2	Aggregate	Aggregate	Plug-in Hybr	2628.969244	136110.5925	1.997002	1997.0015		136110.59			
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Gasoline	17212.0897	642894.8546	44.12358	44123.576	69419.148	642894.85	1201022.641	17.30	LHDT1
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Diesel	14633.12771	526713.4197	25.29557	25295.572		526713.42			
Riverside (SC)	2027	LHDT1	Aggregate	Aggregate	Electricity	492.5286755	31414.36647	0	0		31414.366			
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Gasoline	2393.256129	85530.68603	6.65795	6657.9498	20539.982	85530.686	334771.945	16.30	LHDT2
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Diesel	6722.419556	241624.1987	13.88203	13882.033		241624.2			
Riverside (SC)	2027	LHDT2	Aggregate	Aggregate	Electricity	125.2869519	7617.060264	0	0		7617.0603			
Riverside (SC)	2027	MCY	Aggregate	Aggregate	Gasoline	23872.84416	135933.3741	3.223712	3223.7115	3223.7115	135933.37	135933.3741	42.17	MCY
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Gasoline	157494.1298	6421344.406	307.975	307974.96	313073.52	6421344.4	6696600.902	21.39	MDV
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Diesel	2354.829343	94400.81381	3.800171	3800.1711		94400.814			
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Electricity	2779.433972	95116.63714	0	0		95116.637			
Riverside (SC)	2027	MDV	Aggregate	Aggregate	Plug-in Hybr	1757.393907	85739.04462	1.298394	1298.3935		85739.045			
Riverside (SC)	2027	MH	Aggregate	Aggregate	Gasoline	4014.402617	34124.53465	6.984241	6984.2413	8533.9231	34124.535	50163.52077	5.88	MH
Riverside (SC)	2027	MH	Aggregate	Aggregate	Diesel	1945.315043	16038.98612	1.549682	1549.6818		16038.986			
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Gasoline	1187.040113	49189.22554	9.102215	9102.2154	74108.253	49189.226	657629.6251	8.87	MHDT
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Diesel	13823.92114	580928.627	64.04015	64040.152		580928.63			
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Electricity	371.8319942	18951.18768	0	0		18951.188			
Riverside (SC)	2027	MHDT	Aggregate	Aggregate	Natural Gas	191.1860259	8560.584881	0.965885	965.88528		8560.5849			
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Gasoline	338.9861834	11067.86494	2.084604	2084.6039	4234.383	11067.865	29125.0618	6.88	OBUS
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Diesel	234.5197906	15307.11304	1.914675	1914.6755		15307.113			
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Electricity	5.428935287	350.8664874	0	0		350.86649			
Riverside (SC)	2027	OBUS	Aggregate	Aggregate	Natural Gas	40.94802157	2399.217305	0.235103	235.10343		2399.2173			
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Gasoline	430.4295714	17027.29145	1.934695	1934.695	5925.808	17027.291	38269.3287	6.46	SBUS
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Diesel	464.1146803	9303.444431	1.262005	1262.0047		9303.4444			
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Electricity	14.63497518	401.3400131	0	0		401.34001			
Riverside (SC)	2027	SBUS	Aggregate	Aggregate	Natural Gas	486.6196132	11537.25282	2.729109	2729.1088		11537.253			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Gasoline	147.0093126	18606.89257	3.25336	3253.36	10959.61	18606.893	49932.3546	4.56	UBUS
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Diesel	0.3117338	30.10971099	0.002675	2.6748227		30.109711			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Electricity	0.589513765	89.99316283	0	0		89.993163			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703574	7703.5737		31205.359			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2028

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Gasoline	3.988581574	220.2375349	0.053427	53.426587	327968.6	220.23753	2164028.305	6.60	HHDT
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Diesel	16286.45202	2055799.739	318.9297	318929.68		2055799.7			
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Electricity	443.1127679	51388.26161	0	0		51388.262			
Riverside (SC)	2028	HHDT	Aggregate	Aggregate	Natural Gas	889.8391393	56620.06678	8.985493	8985.4934		56620.067			
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Gasoline	472360.9133	20372156.29	634.9783	634978.32	648196.19	20372156	22779784.76	35.14	LDA
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Diesel	1078.826078	37726.31375	0.84493	844.92959		37726.314			
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Electricity	33534.15965	1556851.62	0	0		1556851.6			
Riverside (SC)	2028	LDA	Aggregate	Aggregate	Plug-in Hybr	16928.42831	813050.5364	12.37294	12372.944		813050.54			
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Gasoline	37855.87026	1440444.902	54.36872	54368.719	54496.075	1440444.9	1458584.787	26.76	LDT1
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Diesel	6.076587483	111.1215276	0.004271	4.2705515		111.12153			
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Electricity	188.4728547	9182.136055	0	0		9182.1361			
Riverside (SC)	2028	LDT1	Aggregate	Aggregate	Plug-in Hybr	164.1063254	8846.627488	0.123086	123.08568		8846.6275			
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Gasoline	217588.1473	9627227.084	361.0417	361041.69	364204.61	9627227.1	9917690.621	27.23	LDT2
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Diesel	743.8336965	34234.83166	0.959155	959.15532		34234.832			
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Electricity	3077.663905	104270.8577	0	0		104270.86			
Riverside (SC)	2028	LDT2	Aggregate	Aggregate	Plug-in Hybr	2979.785378	151957.8474	2.203767	2203.7674		151957.85			
Riverside (SC)	2028	LHDT1	Aggregate	Aggregate	Gasoline	17013.08285	635719.8804	42.78386	42783.86	67372.469	635719.88	1197558.473	17.78	LHDT1
Riverside (SC)	2028	LHDT1	Aggregate	Aggregate	Diesel	14375.59914	513629.3418	24.58861	24588.609		513629.34			
Riverside (SC)	2028	LHDT1	Aggregate	Aggregate	Electricity	775.5486666	48209.25082	0	0		48209.251			
Riverside (SC)	2028	LHDT2	Aggregate	Aggregate	Gasoline	2353.812331	83781.03596	6.417908	6417.9081	19945.389	83781.036	332098.5234	16.65	LHDT2
Riverside (SC)	2028	LHDT2	Aggregate	Aggregate	Diesel	6657.214497	236631.625	13.52748	13527.48		236631.62			
Riverside (SC)	2028	LHDT2	Aggregate	Aggregate	Electricity	197.0476771	11685.86241	0	0		11685.862			
Riverside (SC)	2028	MCY	Aggregate	Aggregate	Gasoline	23825.11116	134879.6959	3.188685	3188.6845	3188.6845	134879.7	134879.6959	42.30	MCY
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Gasoline	157471.3828	6419753.084	301.5065	301506.47	306577.63	6419753.1	6718020.856	21.91	MDV
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Diesel	2313.319617	92055.03155	3.644723	3644.7225		92055.032			
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Electricity	3280.614214	110611.1646	0	0		110611.16			
Riverside (SC)	2028	MDV	Aggregate	Aggregate	Plug-in Hybr	1979.988786	95601.57573	1.426441	1426.4409		95601.576			
Riverside (SC)	2028	MH	Aggregate	Aggregate	Gasoline	3792.760048	32136.12659	6.576553	6576.5528	8080.8779	32136.127	47700.74841	5.90	MH
Riverside (SC)	2028	MH	Aggregate	Aggregate	Diesel	1905.838717	15564.62182	1.504325	1504.3251		15564.622			
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Gasoline	1167.514336	48564.31923	8.892466	8892.466	73657.114	48564.319	669292.9757	9.09	MHDT
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Diesel	14002.28475	581224.0545	63.77308	63773.079		581224.05			
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Electricity	604.2282857	30714.98313	0	0		30714.983			
Riverside (SC)	2028	MHDT	Aggregate	Aggregate	Natural Gas	199.9675247	8789.618879	0.991569	991.56945		8789.6189			
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Gasoline	327.7078639	10548.10232	1.966652	1966.652	4110.663	10548.102	28947.3701	7.04	OBUS
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Diesel	238.556013	15389.24479	1.905282	1905.282		15389.245			
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Electricity	8.51445928	545.8268781	0	0		545.82688			
Riverside (SC)	2028	OBUS	Aggregate	Aggregate	Natural Gas	42.59688326	2464.196156	0.238729	238.72887		2464.1962			
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Gasoline	431.0753654	17042.56634	1.933026	1933.0257	5903.131	17042.566	38344.6352	6.50	SBUS
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Diesel	451.0585439	8951.328084	1.211407	1211.4066		8951.3281			
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Electricity	23.22081025	641.5412948	0	0		641.54129			
Riverside (SC)	2028	SBUS	Aggregate	Aggregate	Natural Gas	499.8225406	11709.19947	2.758699	2758.6985		11709.199			
Riverside (SC)	2028	UBUS	Aggregate	Aggregate	Gasoline	132.0967345	16779.39189	2.792319	2792.3188	15869.53	16779.392	81237.892	5.12	UBUS
Riverside (SC)	2028	UBUS	Aggregate	Aggregate	Electricity	56.86515729	8885.94529	0	0		8885.9453			
Riverside (SC)	2028	UBUS	Aggregate	Aggregate	Natural Gas	213.0114547	24367.19561	5.373642	5373.6421		24367.196			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703574	7703.5737		31205.359			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2029

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2029	HHDT	Aggregate	Aggregate	Gasoline	3.521277863	202.1541818	0.047864	47.864085	327855.03	202.15418	2216346.975	6.76	HHDT
Riverside (SC)	2029	HHDT	Aggregate	Aggregate	Diesel	16479.13359	2084622.808	318.7191	318719.07		2084622.8			
Riverside (SC)	2029	HHDT	Aggregate	Aggregate	Electricity	637.9174448	73895.81481	0	0		73895.815			
Riverside (SC)	2029	HHDT	Aggregate	Aggregate	Natural Gas	915.0240056	57626.19745	9.088102	9088.1016		57626.197			
Riverside (SC)	2029	LDA	Aggregate	Aggregate	Gasoline	473378.0047	20392511.5	624.7125	624712.53	638084.2	20392511	22946897.19	35.96	LDA
Riverside (SC)	2029	LDA	Aggregate	Aggregate	Diesel	984.2848703	34105.5256	0.754933	754.93268		34105.526			
Riverside (SC)	2029	LDA	Aggregate	Aggregate	Electricity	36672.49583	1679783.773	0	0		1679783.8			
Riverside (SC)	2029	LDA	Aggregate	Aggregate	Plug-in Hybr	17717.23467	840496.3916	12.61674	12616.737		840496.39			
Riverside (SC)	2029	LDT1	Aggregate	Aggregate	Gasoline	37329.77745	1426016.935	52.87715	52877.148	53027.953	1426016.9	1448247.044	27.31	LDT1
Riverside (SC)	2029	LDT1	Aggregate	Aggregate	Diesel	3.427515898	64.77720353	0.002472	2.4719898		64.777204			
Riverside (SC)	2029	LDT1	Aggregate	Aggregate	Electricity	235.7701723	11443.05065	0	0		11443.051			
Riverside (SC)	2029	LDT1	Aggregate	Aggregate	Plug-in Hybr	201.238108	10722.28093	0.148333	148.33348		10722.281			
Riverside (SC)	2029	LDT2	Aggregate	Aggregate	Gasoline	222709.7741	9827243.731	361.9096	361909.61	365296.49	9827243.7	10152026.43	27.79	LDT2
Riverside (SC)	2029	LDT2	Aggregate	Aggregate	Diesel	772.0405947	35298.39045	0.973667	973.66671		35298.39			
Riverside (SC)	2029	LDT2	Aggregate	Aggregate	Electricity	3632.690453	121501.2546	0	0		121501.25			
Riverside (SC)	2029	LDT2	Aggregate	Aggregate	Plug-in Hybr	3341.592403	167983.0531	2.413208	2413.2082		167983.05			
Riverside (SC)	2029	LHDT1	Aggregate	Aggregate	Gasoline	16795.68965	626817.5943	41.44446	41444.463	65307.905	626817.59	1195682.643	18.31	LHDT1
Riverside (SC)	2029	LHDT1	Aggregate	Aggregate	Diesel	14100.4336	499931.2802	23.86344	23863.441		499931.28			
Riverside (SC)	2029	LHDT1	Aggregate	Aggregate	Electricity	1136.869424	68933.76814	0	0		68933.768			
Riverside (SC)	2029	LHDT2	Aggregate	Aggregate	Gasoline	2311.360939	81890.43268	6.18035	6180.3498	19337.709	81890.433	329846.7853	17.06	LHDT2
Riverside (SC)	2029	LHDT2	Aggregate	Aggregate	Diesel	6579.945196	231251.2981	13.15736	13157.36		231251.3			
Riverside (SC)	2029	LHDT2	Aggregate	Aggregate	Electricity	288.5072961	16705.05449	0	0		16705.054			
Riverside (SC)	2029	MCY	Aggregate	Aggregate	Gasoline	23785.59397	133992.5339	3.158221	3158.2205	3158.2205	133992.53	133992.5339	42.43	MCY
Riverside (SC)	2029	MDV	Aggregate	Aggregate	Gasoline	157566.4176	6422134.222	295.7356	295735.64	300787.1	6422134.2	6743594.1	22.42	MDV
Riverside (SC)	2029	MDV	Aggregate	Aggregate	Diesel	2270.052008	89793.21905	3.49719	3497.1902		89793.219			
Riverside (SC)	2029	MDV	Aggregate	Aggregate	Electricity	3798.420259	126244.9533	0	0		126244.95			
Riverside (SC)	2029	MDV	Aggregate	Aggregate	Plug-in Hybr	2206.461916	105421.7052	1.554268	1554.2681		105421.71			
Riverside (SC)	2029	MH	Aggregate	Aggregate	Gasoline	3580.024094	30304.87469	6.200886	6200.8863	7662.8515	30304.875	45426.06573	5.93	MH
Riverside (SC)	2029	MH	Aggregate	Aggregate	Diesel	1866.96934	15121.19104	1.461965	1461.9652		15121.191			
Riverside (SC)	2029	MHDT	Aggregate	Aggregate	Gasoline	1146.504322	47682.88265	8.64784	8647.8398	72734.497	47682.883	681256.8228	9.37	MHDT
Riverside (SC)	2029	MHDT	Aggregate	Aggregate	Diesel	14090.24645	577637.3476	63.076	63075.995		577637.35			
Riverside (SC)	2029	MHDT	Aggregate	Aggregate	Electricity	926.590875	46978.62065	0	0		46978.621			
Riverside (SC)	2029	MHDT	Aggregate	Aggregate	Natural Gas	207.3526487	8957.971936	1.010662	1010.6624		8957.9719			
Riverside (SC)	2029	OBUS	Aggregate	Aggregate	Gasoline	317.2534562	10029.82553	1.852693	1852.6929	3991.549	10029.826	28835.0568	7.22	OBUS
Riverside (SC)	2029	OBUS	Aggregate	Aggregate	Diesel	241.8508995	15476.67687	1.896857	1896.8571		15476.677			
Riverside (SC)	2029	OBUS	Aggregate	Aggregate	Electricity	12.69375286	806.996631	0	0		806.99663			
Riverside (SC)	2029	OBUS	Aggregate	Aggregate	Natural Gas	44.00215554	2521.557795	0.241999	241.99896		2521.5578			
Riverside (SC)	2029	SBUS	Aggregate	Aggregate	Gasoline	430.58641	17011.24293	1.926243	1926.2426	5861.029	17011.243	38393.5653	6.55	SBUS
Riverside (SC)	2029	SBUS	Aggregate	Aggregate	Diesel	434.8515342	8570.48699	1.156597	1156.5968		8570.487			
Riverside (SC)	2029	SBUS	Aggregate	Aggregate	Electricity	35.16581802	977.8677573	0	0		977.86776			
Riverside (SC)	2029	SBUS	Aggregate	Aggregate	Natural Gas	511.5178287	11833.96763	2.77819	2778.1897		11833.968			
Riverside (SC)	2029	UBUS	Aggregate	Aggregate	Gasoline	132.3115365	16803.80623	2.778192	2778.1915	14840.09	16803.806	81338.0701	5.48	UBUS
Riverside (SC)	2029	UBUS	Aggregate	Aggregate	Electricity	96.0161752	13354.27709	0	0		13354.277			
Riverside (SC)	2029	UBUS	Aggregate	Aggregate	Natural Gas	174.4504903	19974.62765	4.358329	4358.3293		19974.628			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703574	7703.5737		31205.359			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2030

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2030	HHDT	Aggregate	Aggregate	Gasoline	2.967586625	184.9821766	0.042617	42.61741	327356.11	184.98218	2269980.868	6.93	HHDT
Riverside (SC)	2030	HHDT	Aggregate	Aggregate	Diesel	16609.15097	2110490.455	318.1454	318145.4		2110490.5			
Riverside (SC)	2030	HHDT	Aggregate	Aggregate	Electricity	870.8442943	100841.5654	0	0		100841.57			
Riverside (SC)	2030	HHDT	Aggregate	Aggregate	Natural Gas	935.475286	58463.86618	9.168088	9168.0876		58463.866			
Riverside (SC)	2030	LDA	Aggregate	Aggregate	Gasoline	474280.5182	20414204.08	615.4867	615486.71	628971.2	20414204	23109339.07	36.74	LDA
Riverside (SC)	2030	LDA	Aggregate	Aggregate	Diesel	890.6615466	30736.13468	0.671376	671.37599		30736.135			
Riverside (SC)	2030	LDA	Aggregate	Aggregate	Electricity	39805.71254	1800386.56	0	0		1800386.6			
Riverside (SC)	2030	LDA	Aggregate	Aggregate	Plug-in Hybr	18428.80939	864012.3006	12.81312	12813.119		864012.3			
Riverside (SC)	2030	LDT1	Aggregate	Aggregate	Gasoline	36835.1094	1413210.421	51.52041	51520.413	51697.12	1413210.4	1440036.009	27.86	LDT1
Riverside (SC)	2030	LDT1	Aggregate	Aggregate	Diesel	0.611897759	16.8918368	0.000614	0.6140793		16.891837			
Riverside (SC)	2030	LDT1	Aggregate	Aggregate	Electricity	290.4750144	14027.544	0	0		14027.544			
Riverside (SC)	2030	LDT1	Aggregate	Aggregate	Plug-in Hybr	242.566466	12781.15236	0.176093	176.09285		12781.152			
Riverside (SC)	2030	LDT2	Aggregate	Aggregate	Gasoline	227626.5815	10012658.43	362.7807	362780.67	366392.78	10012658	10372991.69	28.31	LDT2
Riverside (SC)	2030	LDT2	Aggregate	Aggregate	Diesel	798.9568229	36277.39289	0.986889	986.88907		36277.393			
Riverside (SC)	2030	LDT2	Aggregate	Aggregate	Electricity	4232.749267	139883.643	0	0		139883.64			
Riverside (SC)	2030	LDT2	Aggregate	Aggregate	Plug-in Hybr	3713.158646	184172.2252	2.625215	2625.2147		184172.23			
Riverside (SC)	2030	LHDT1	Aggregate	Aggregate	Gasoline	16556.1228	616387.0613	40.10923	40109.232	63229.22	616387.06	1195437.037	18.91	LHDT1
Riverside (SC)	2030	LHDT1	Aggregate	Aggregate	Diesel	13807.4056	485670.076	23.11999	23119.988		485670.08			
Riverside (SC)	2030	LHDT1	Aggregate	Aggregate	Electricity	1577.187134	93379.90013	0	0		93379.9			
Riverside (SC)	2030	LHDT2	Aggregate	Aggregate	Gasoline	2266.819498	79871.54962	5.946314	5946.3142	18716.874	79871.55	327963.7374	17.52	LHDT2
Riverside (SC)	2030	LHDT2	Aggregate	Aggregate	Diesel	6488.812836	225468.8622	12.77056	12770.56		225468.86			
Riverside (SC)	2030	LHDT2	Aggregate	Aggregate	Electricity	399.7581132	22623.32567	0	0		22623.326			
Riverside (SC)	2030	MCY	Aggregate	Aggregate	Gasoline	23721.90098	133239.4177	3.130648	3130.6485	3130.6485	133239.42	133239.4177	42.56	MCY
Riverside (SC)	2030	MDV	Aggregate	Aggregate	Gasoline	157782.5167	6428601.892	290.6636	290663.56	295701.06	6428601.9	6773551.149	22.91	MDV
Riverside (SC)	2030	MDV	Aggregate	Aggregate	Diesel	2224.019723	87601.07267	3.355974	3355.9743		87601.073			
Riverside (SC)	2030	MDV	Aggregate	Aggregate	Electricity	4336.062239	142162.4125	0	0		142162.41			
Riverside (SC)	2030	MDV	Aggregate	Aggregate	Plug-in Hybr	2435.718824	115185.7716	1.681523	1681.5227		115185.77			
Riverside (SC)	2030	MH	Aggregate	Aggregate	Gasoline	3385.980841	28690.98	5.86992	5869.9201	7292.5917	28690.98	43400.79558	5.95	MH
Riverside (SC)	2030	MH	Aggregate	Aggregate	Diesel	1828.618507	14709.81558	1.422672	1422.6716		14709.816			
Riverside (SC)	2030	MHDT	Aggregate	Aggregate	Gasoline	1121.808481	46503.91073	8.360687	8360.6865	71337.706	46503.911	693470.0948	9.72	MHDT
Riverside (SC)	2030	MHDT	Aggregate	Aggregate	Diesel	14086.50638	570229.549	61.95428	61954.281		570229.55			
Riverside (SC)	2030	MHDT	Aggregate	Aggregate	Electricity	1337.301971	67676.74715	0	0		67676.747			
Riverside (SC)	2030	MHDT	Aggregate	Aggregate	Natural Gas	213.50876	9059.887916	1.022738	1022.7381		9059.8879			
Riverside (SC)	2030	OBUS	Aggregate	Aggregate	Gasoline	306.52092	9495.025729	1.738877	1738.8773	3875.44	9495.0257	28765.6812	7.42	OBUS
Riverside (SC)	2030	OBUS	Aggregate	Aggregate	Diesel	243.9224056	15566.83183	1.891571	1891.5712		15566.832			
Riverside (SC)	2030	OBUS	Aggregate	Aggregate	Electricity	17.93419592	1129.736842	0	0		1129.7368			
Riverside (SC)	2030	OBUS	Aggregate	Aggregate	Natural Gas	45.17375328	2574.086746	0.244991	244.9914		2574.0867			
Riverside (SC)	2030	SBUS	Aggregate	Aggregate	Gasoline	428.8569519	16930.28687	1.913943	1913.9435	5797.622	16930.287	38413.1774	6.63	SBUS
Riverside (SC)	2030	SBUS	Aggregate	Aggregate	Diesel	415.619616	8151.538011	1.096267	1096.2665		8151.538			
Riverside (SC)	2030	SBUS	Aggregate	Aggregate	Electricity	50.63292432	1419.299274	0	0		1419.2993			
Riverside (SC)	2030	SBUS	Aggregate	Aggregate	Natural Gas	521.7784396	11912.05324	2.787412	2787.412		11912.053			
Riverside (SC)	2030	UBUS	Aggregate	Aggregate	Gasoline	109.2615591	11695.08832	1.495692	1495.6921	13458.34	11695.088	81438.2483	6.05	UBUS
Riverside (SC)	2030	UBUS	Aggregate	Aggregate	Electricity	127.945819	19150.64654	0	0		19150.647			
Riverside (SC)	2030	UBUS	Aggregate	Aggregate	Natural Gas	166.3756792	19387.15427	4.259076	4259.0761		19387.154			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703574	7703.5737		31205.359			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2031

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2031	HHDT	Aggregate	Aggregate	Gasoline	2.48916581	171.4070601	0.038459	38.459081	328036.53	171.40706	2335516.193	7.12	HHDT
Riverside (SC)	2031	HHDT	Aggregate	Aggregate	Diesel	16724.71055	2144031.604	318.7409	318740.87		2144031.6			
Riverside (SC)	2031	HHDT	Aggregate	Aggregate	Electricity	1138.07272	131954.434	0	0		131954.43			
Riverside (SC)	2031	HHDT	Aggregate	Aggregate	Natural Gas	952.7857829	59358.74842	9.257206	9257.2059		59358.748			
Riverside (SC)	2031	LDA	Aggregate	Aggregate	Gasoline	475225.9238	20443705.18	607.4275	607427.53	621004.06	20443705	23269989.55	37.47	LDA
Riverside (SC)	2031	LDA	Aggregate	Aggregate	Diesel	816.7351562	27781.82698	0.599549	599.54859		27781.827			
Riverside (SC)	2031	LDA	Aggregate	Aggregate	Electricity	42840.66622	1913779.703	0	0		1913779.7			
Riverside (SC)	2031	LDA	Aggregate	Aggregate	Plug-in Hybr	19077.8689	884722.8436	12.97697	12976.972		884722.84			
Riverside (SC)	2031	LDT1	Aggregate	Aggregate	Gasoline	36393.31311	1402767.16	50.3223	50322.303	50525.66	1402767.2	1434102.781	28.38	LDT1
Riverside (SC)	2031	LDT1	Aggregate	Aggregate	Diesel	0.211979968	10.44543878	0.00036	0.3600605		10.445439			
Riverside (SC)	2031	LDT1	Aggregate	Aggregate	Electricity	345.6921885	16551.22913	0	0		16551.229			
Riverside (SC)	2031	LDT1	Aggregate	Aggregate	Plug-in Hybr	283.9521919	14773.94616	0.202996	202.99632		14773.946			
Riverside (SC)	2031	LDT2	Aggregate	Aggregate	Gasoline	232317.5882	10185996.37	363.6802	363680.17	367505.15	10185996	10580320.81	28.79	LDT2
Riverside (SC)	2031	LDT2	Aggregate	Aggregate	Diesel	823.8668585	37181.27206	0.998757	998.75704		37181.272			
Riverside (SC)	2031	LDT2	Aggregate	Aggregate	Electricity	4830.426119	157615.9472	0	0		157615.95			
Riverside (SC)	2031	LDT2	Aggregate	Aggregate	Plug-in Hybr	4076.458962	199527.2261	2.826229	2826.2288		199527.23			
Riverside (SC)	2031	LHDT1	Aggregate	Aggregate	Gasoline	16297.17001	604347.8207	38.77215	38772.146	61129.85	604347.82	1196540.607	19.57	LHDT1
Riverside (SC)	2031	LHDT1	Aggregate	Aggregate	Diesel	13497.7625	470845.729	22.3577	22357.704		470845.73			
Riverside (SC)	2031	LHDT1	Aggregate	Aggregate	Electricity	2096.426015	121347.0574	0	0		121347.06			
Riverside (SC)	2031	LHDT2	Aggregate	Aggregate	Gasoline	2216.421711	77657.98602	5.707543	5707.543	18080.368	77657.986	326431.3172	18.05	LHDT2
Riverside (SC)	2031	LHDT2	Aggregate	Aggregate	Diesel	6386.054749	219380.1548	12.37282	12372.825		219380.15			
Riverside (SC)	2031	LHDT2	Aggregate	Aggregate	Electricity	530.7529788	29393.17646	0	0		29393.176			
Riverside (SC)	2031	MCY	Aggregate	Aggregate	Gasoline	23667.92903	132645.4201	3.10742	3107.4198	3107.4198	132645.42	132645.4201	42.69	MCY
Riverside (SC)	2031	MDV	Aggregate	Aggregate	Gasoline	158156.5114	6440344.973	286.3271	286327.08	291358.8	6440345	6807881.388	23.37	MDV
Riverside (SC)	2031	MDV	Aggregate	Aggregate	Diesel	2181.847033	85628.44784	3.228044	3228.0437		85628.448			
Riverside (SC)	2031	MDV	Aggregate	Aggregate	Electricity	4866.821763	157376.8912	0	0		157376.89			
Riverside (SC)	2031	MDV	Aggregate	Aggregate	Plug-in Hybr	2661.275124	124531.0766	1.803673	1803.6732		124531.08			
Riverside (SC)	2031	MH	Aggregate	Aggregate	Gasoline	3206.786797	27245.05723	5.573895	5573.8951	6960.0069	27245.057	41571.55725	5.97	MH
Riverside (SC)	2031	MH	Aggregate	Aggregate	Diesel	1790.336803	14326.50003	1.386112	1386.1118		14326.5			
Riverside (SC)	2031	MHDT	Aggregate	Aggregate	Gasoline	1097.190431	45214.48258	8.0636	8063.5999	69858.641	45214.483	709093.1749	10.15	MHDT
Riverside (SC)	2031	MHDT	Aggregate	Aggregate	Diesel	14043.6837	562372.9142	60.76354	60763.537		562372.91			
Riverside (SC)	2031	MHDT	Aggregate	Aggregate	Electricity	1834.160656	92373.26504	0	0		92373.265			
Riverside (SC)	2031	MHDT	Aggregate	Aggregate	Natural Gas	218.8141728	9132.513143	1.031503	1031.5033		9132.5131			
Riverside (SC)	2031	OBUS	Aggregate	Aggregate	Gasoline	296.5676815	8991.104447	1.633606	1633.606	3770.578	8991.1044	28750.0534	7.62	OBUS
Riverside (SC)	2031	OBUS	Aggregate	Aggregate	Diesel	244.9915574	15657.77578	1.889044	1889.0442		15657.776			
Riverside (SC)	2031	OBUS	Aggregate	Aggregate	Electricity	23.71649554	1476.770925	0	0		1476.7709			
Riverside (SC)	2031	OBUS	Aggregate	Aggregate	Natural Gas	46.31015393	2624.40221	0.247927	247.92743		2624.4022			
Riverside (SC)	2031	SBUS	Aggregate	Aggregate	Gasoline	425.5710684	16787.21531	1.894448	1894.448	5712.86	16787.215	38381.1813	6.72	SBUS
Riverside (SC)	2031	SBUS	Aggregate	Aggregate	Diesel	393.5300101	7701.256301	1.0313	1031.3001		7701.2563			
Riverside (SC)	2031	SBUS	Aggregate	Aggregate	Electricity	69.12686571	1943.496232	0	0		1943.4962			
Riverside (SC)	2031	SBUS	Aggregate	Aggregate	Natural Gas	530.5137287	11949.21345	2.787112	2787.1118		11949.213			
Riverside (SC)	2031	UBUS	Aggregate	Aggregate	Gasoline	109.2315927	11682.77024	1.489549	1489.5491	11930.24	11682.77	81538.4265	6.83	UBUS
Riverside (SC)	2031	UBUS	Aggregate	Aggregate	Electricity	166.5606752	24503.94604	0	0		24503.946			
Riverside (SC)	2031	UBUS	Aggregate	Aggregate	Natural Gas	128.5956449	14146.35103	2.737121	2737.1207		14146.351			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703574	7703.5737		31205.359			

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2032

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Energy Consumption	Total Fuel	VMT	Total VMT	Miles per Gallon	Vehicle Class
Riverside (SC)	2032	HHDT	Aggregate	Aggregate	Gasoline	2.311031431	162.5646505	0.035691	35.691339	328701.18	162.56465	2403204.217	7.31	HHDT
Riverside (SC)	2032	HHDT	Aggregate	Aggregate	Diesel	16807.88876	2176774.253	319.3189	319318.95		2176774.3			
Riverside (SC)	2032	HHDT	Aggregate	Aggregate	Electricity	1427.1214	166026.9172	0	0		166026.92			
Riverside (SC)	2032	HHDT	Aggregate	Aggregate	Natural Gas	967.5650369	60240.48314	9.346543	9346.5428		60240.483			
Riverside (SC)	2032	LDA	Aggregate	Aggregate	Gasoline	476310.8107	20483251.08	600.3777	600377.69	614032.08	20483251	23429968.05	38.16	LDA
Riverside (SC)	2032	LDA	Aggregate	Aggregate	Diesel	737.2690005	25027.26596	0.531748	531.74829		25027.266			
Riverside (SC)	2032	LDA	Aggregate	Aggregate	Electricity	45743.69725	2018684.853	0	0		2018684.9			
Riverside (SC)	2032	LDA	Aggregate	Aggregate	Plug-in Hybr	19670.04624	903004.8551	13.12264	13122.638		903004.86			
Riverside (SC)	2032	LDT1	Aggregate	Aggregate	Gasoline	36024.7298	1394524.955	49.26386	49263.858	49492.907	1394525	1430147.127	28.90	LDT1
Riverside (SC)	2032	LDT1	Aggregate	Aggregate	Diesel	0.227951242	11.06600638	0.00038	0.3795795		11.066006			
Riverside (SC)	2032	LDT1	Aggregate	Aggregate	Electricity	400.1175378	18949.63717	0	0		18949.637			
Riverside (SC)	2032	LDT1	Aggregate	Aggregate	Plug-in Hybr	324.6409992	16661.46799	0.22867	228.66997		16661.468			
Riverside (SC)	2032	LDT2	Aggregate	Aggregate	Gasoline	236806.5944	10348278.38	364.504	364503.96	368528.46	10348278	10774457.15	29.24	LDT2
Riverside (SC)	2032	LDT2	Aggregate	Aggregate	Diesel	846.8601087	37998.84042	1.008519	1008.5191		37998.84			
Riverside (SC)	2032	LDT2	Aggregate	Aggregate	Electricity	5414.118203	174309.6769	0	0		174309.68			
Riverside (SC)	2032	LDT2	Aggregate	Aggregate	Plug-in Hybr	4427.487734	213870.255	3.015984	3015.9845		213870.26			
Riverside (SC)	2032	LHDT1	Aggregate	Aggregate	Gasoline	16032.27798	590864.4132	37.4362	37436.202	59009.522	590864.41	1199183.772	20.32	LHDT1
Riverside (SC)	2032	LHDT1	Aggregate	Aggregate	Diesel	13185.39156	455655.194	21.57332	21573.32		455655.19			
Riverside (SC)	2032	LHDT1	Aggregate	Aggregate	Electricity	2694.83744	152664.1644	0	0		152664.16			
Riverside (SC)	2032	LHDT2	Aggregate	Aggregate	Gasoline	2161.811166	75267.05305	5.464273	5464.273	17425.481	75267.053	325211.7014	18.66	LHDT2
Riverside (SC)	2032	LHDT2	Aggregate	Aggregate	Diesel	6275.204869	212972.76	11.96121	11961.208		212972.76			
Riverside (SC)	2032	LHDT2	Aggregate	Aggregate	Electricity	681.4792065	36971.88838	0	0		36971.888			
Riverside (SC)	2032	MCY	Aggregate	Aggregate	Gasoline	23642.72777	132191.5643	3.08782	3087.8198	3087.8198	132191.56	132191.5643	42.81	MCY
Riverside (SC)	2032	MDV	Aggregate	Aggregate	Gasoline	158655.8191	6456075.739	282.5353	282535.3	287560.78	6456075.7	6844713.113	23.80	MDV
Riverside (SC)	2032	MDV	Aggregate	Aggregate	Diesel	2141.089808	83758.26717	3.106782	3106.7815		83758.267			
Riverside (SC)	2032	MDV	Aggregate	Aggregate	Electricity	5382.731591	171630.6822	0	0		171630.68			
Riverside (SC)	2032	MDV	Aggregate	Aggregate	Plug-in Hybr	2878.046609	133248.4243	1.918708	1918.7081		133248.42			
Riverside (SC)	2032	MH	Aggregate	Aggregate	Gasoline	3037.676571	25929.36897	5.303148	5303.1484	6655.6156	25929.369	39902.19193	6.00	MH
Riverside (SC)	2032	MH	Aggregate	Aggregate	Diesel	1752.730653	13972.82296	1.352467	1352.4672		13972.823			
Riverside (SC)	2032	MHDT	Aggregate	Aggregate	Gasoline	1071.482225	43838.41774	7.757428	7757.4282	68210.156	43838.418	725084.2026	10.63	MHDT
Riverside (SC)	2032	MHDT	Aggregate	Aggregate	Diesel	13937.98265	553329.8408	59.4186	59418.605		553329.84			
Riverside (SC)	2032	MHDT	Aggregate	Aggregate	Electricity	2369.074686	118763.5084	0	0		118763.51			
Riverside (SC)	2032	MHDT	Aggregate	Aggregate	Natural Gas	222.1330138	9152.435653	1.034124	1034.1238		9152.4357			
Riverside (SC)	2032	OBUS	Aggregate	Aggregate	Gasoline	286.3920084	8499.57219	1.532646	1532.6464	3671.412	8499.5722	28758.9739	7.83	OBUS
Riverside (SC)	2032	OBUS	Aggregate	Aggregate	Diesel	245.8003985	15752.48789	1.888338	1888.3378		15752.488			
Riverside (SC)	2032	OBUS	Aggregate	Aggregate	Electricity	29.89355949	1837.584793	0	0		1837.5848			
Riverside (SC)	2032	OBUS	Aggregate	Aggregate	Natural Gas	47.36148162	2669.329002	0.250428	250.42778		2669.329			
Riverside (SC)	2032	SBUS	Aggregate	Aggregate	Gasoline	419.5905803	16535.74084	1.86208	1862.0797	5602.57	16535.741	38250.814	6.83	SBUS
Riverside (SC)	2032	SBUS	Aggregate	Aggregate	Diesel	369.3714992	7225.117647	0.962532	962.53167		7225.1176			
Riverside (SC)	2032	SBUS	Aggregate	Aggregate	Electricity	90.31632089	2540.75414	0	0		2540.7541			
Riverside (SC)	2032	SBUS	Aggregate	Aggregate	Natural Gas	537.7831504	11949.20137	2.777959	2777.9589		11949.201			
Riverside (SC)	2032	UBUS	Aggregate	Aggregate	Gasoline	109.314145	11686.34287	1.487332	1487.3322	11892.78	11686.343	81638.6046	6.86	UBUS
Riverside (SC)	2032	UBUS	Aggregate	Aggregate	Electricity	177.5601711	24875.33301	0	0		24875.333			
Riverside (SC)	2032	UBUS	Aggregate	Aggregate	Natural Gas	118.3184521	13871.56959	2.701876	2701.8762		13871.57			
Riverside (SC)	2027	UBUS	Aggregate	Aggregate	Natural Gas	253.257931	31205.35917	7.703574	7703.5737		31205.359			

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